



**NIPPON PAPER GROUP**

# Sustainability Report 2014



# Major Operating Companies and Production Sites (As of March 31, 2014)

## Pulp and Paper Business

- Nippon Paper Industries Co., Ltd.
  - 1 Kushiro Mill
  - 2 Hokkaido Mill (Asahikawa)
  - 3 Hokkaido Mill (Yufutsu)
  - 4 Hokkaido Mill (Shiraoi)
  - 5 Akita Mill
  - 6 Ishinomaki Mill
  - 7 Iwanuma Mill
  - 8 Nakoso Mill
  - 9 Ashikaga Mill
  - 10 Soka Mill
  - 11 Yoshinaga Mill
  - 12 Fuji Mill
  - 13 Otake Mill
  - 14 Iwakuni Mill
  - 15 Yatsushiro Mill
- ◆ Nippon Paper Crecia Co., Ltd.
  - 16 Tokyo Mill
  - 17 Kaisei Mill
  - 18 Kyoto Mill
  - 19 Koyo Mill
- Nippon Paper Papylia Co., Ltd.
  - 20 Harada Mill
  - 21 Suita Mill
  - 22 Kochi Mill
- ▲ Kitakami Paper Co., Ltd.
  - 23 Ichinoseki Mill
- Nippon Paper Industries USA Co., Ltd.
  - 24 Port Angeles Mill
- Paper Australia Pty Ltd.
  - 25 Maryvale Mill
  - 26 Shoalhaven Mill
- Jujo Thermal Oy
  - 27 Kauttua Mill

## Paper-Related Business

- Nippon Paper Industries Co., Ltd. (Paper-Pak Division)
  - 1 SOKA PAPER-PAK CO., LTD.
  - 2 EGAWA PAPER-PAK CO., LTD.
  - 3 MIKI PAPER-PAK CO., LTD.
  - 4 ISHIOKA KAKO CO., LTD.
  - 5 Nakoso Film Co., Ltd.
- ◆ Nippon Paper Industries Co., Ltd. (Chemical Division)
  - 6 Gotsu Mill
  - 7 Iwakuni Mill
  - 8 Higashimatsuyama Mill
  - 9 Yufutsu Mill
- Nippon Seitai Corporation
  - 10 Asahikawa Mill
  - 11 Maebashi Mill
  - 12 Saitama Mill
  - 13 Niigata Mill
  - 14 Kyoto Mill
  - 15 Kyushu Mill
- ▲ Akita Jujo Chemicals Co., Ltd.
  - 16 Head Office Plant

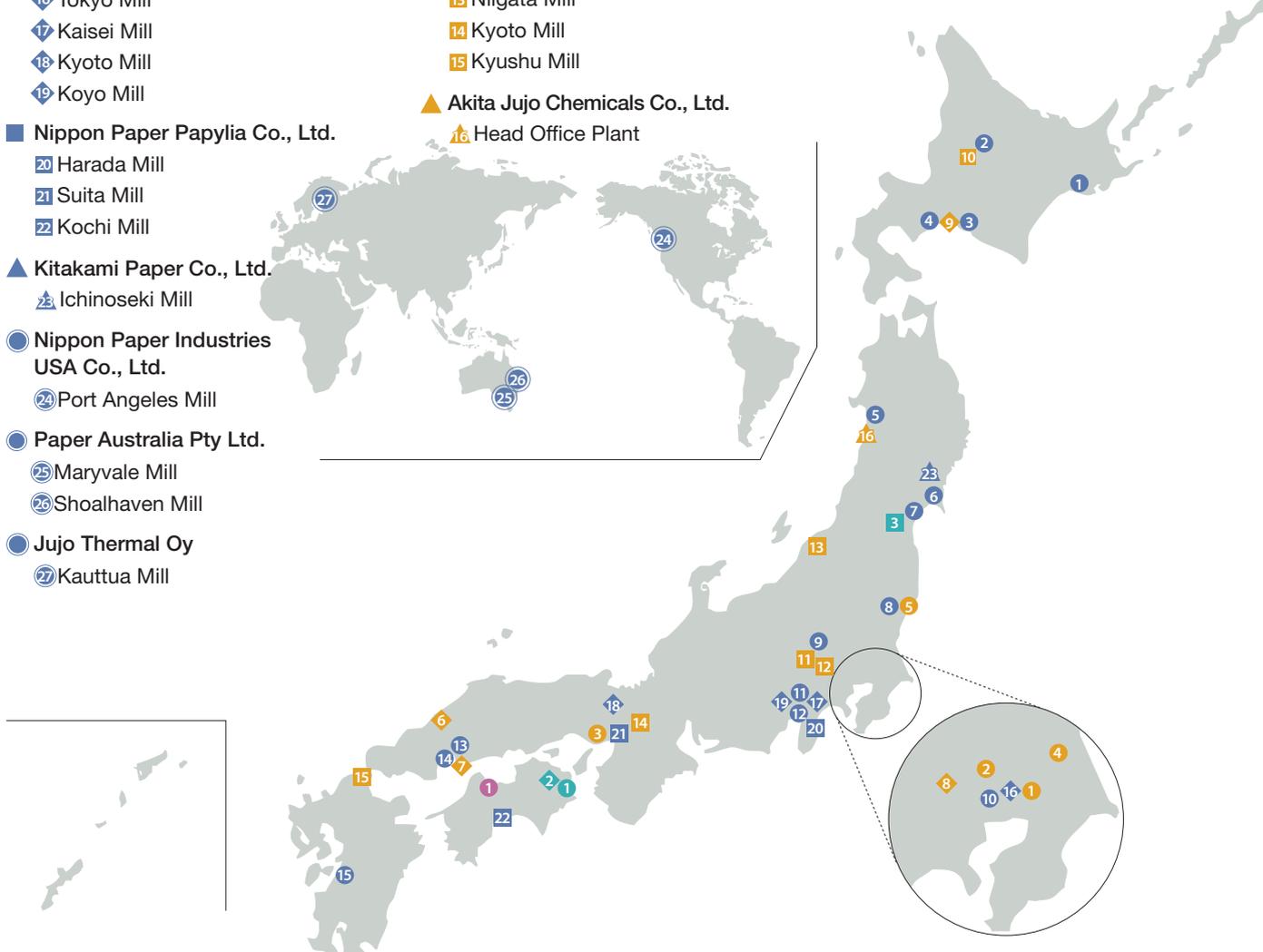
## Wood Products and Construction Related Business

- PAL WOOD MATERIALS
  - 1 PALTEC Co., Ltd.
- ◆ Nippon Paper Lumber Co., Ltd.
  - 2 N&E Co., Ltd.
- Daishowa Uniboard Co., Ltd.
  - 3 Miyagi Mill

## Other Businesses

- SHIKOKU COCA-COLA BOTTLING CO., LTD.
  - 1 Komatsu Plant

Location of Production Sites



## Editorial Policy

The Nippon Paper Group publishes its sustainability report to provide stakeholders with a broad overview of what we are doing to meet our corporate social responsibilities (CSR). In the past, our sustainability reports have consisted of a full, detailed version and a highlight edition. Beginning with the current report, however, we have chosen to produce a single edition that focuses on our most important initiatives while retaining comprehensiveness of coverage.

### Period Covered

April 1, 2013–March 31, 2014

Includes information from before April 1, 2013 and after March 31, 2014. Dates are indicated in such cases.

### Scope of Organizations Covered

The reporting entity is Nippon Paper Industries Co., Ltd. Data, however, were compiled as of March 31, 2014 for Nippon Paper Industries Co., Ltd. and all 44 of its consolidated subsidiaries.

#### Environmental Coverage

The scope of the report covers the basic environmental policies, systems, environmental accounting and environment performance and other data of the 21 companies whose names are shown below, which include all major production bases. Also included within the scope of the report is data for six non-consolidated subsidiaries of the aforementioned major production bases.

Consolidated: Nippon Paper Industries Co., Ltd.; Nippon Paper Crecia Co., Ltd.; Nippon Paper Papyrus Co., Ltd.; Paper Australia Pty Ltd.; NP Trading Co., Ltd.; Kitakami Paper Co., Ltd.; Nippon Paper Industries USA Co., Ltd.; Nippon Seitai Corporation; Nippon Paper Lumber Co., Ltd.; PAL Co., Ltd.; N&E Co., Ltd.; Daishowa Uniboard Co., Ltd.; SHIKOKU COCA-COLA BOTTLING CO., LTD.; Nippon Paper Development Co., Ltd.; GAC CO., LTD.

**(The contribution to total consolidated sales of the companies listed here was 94%.)**

Non-consolidated: SOKA PAPERPAK CO., LTD.; EGAWA PAPER-PAK CO., LTD.; MIKI PAPER-PAK CO., LTD.; ISHIOKA KAKO CO., LTD.; Nakoso Film Co., Ltd.; Akita Jujo Chemicals Co., Ltd.

### Referenced Guidelines

- *Environmental Reporting Guidelines* (2012) of the Ministry of the Environment
- *Sustainability Reporting Guidelines* (Version 3.1) issued by the Global Reporting Initiative (GRI)
- United Nations Global Compact
- ISO 26000, etc.

### Disclaimer

This report includes not only statements of fact and historical data but also plans, forecasts and estimates (forward-looking statements) based on the business plans and policies of the Nippon Paper Group. These forward-looking statements are the result of assumptions or judgments based on currently available information as this report was prepared. It should be noted that forward-looking statements may differ significantly from actual results due to the impacts of a number of important factors.

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## As a Comprehensive Biomass Enterprise, Growing Sustainably and Developing together with Society

### Accelerating Transformation of the Business Structure for Growth as a Comprehensive Biomass Enterprise

The Nippon Paper Group, under its Fourth Medium-Term Business Plan, covering fiscal 2012 to 2014, aims to improve the profitability of its core paper business and accelerate the transformation of its business structure to achieve growth as a comprehensive biomass enterprise.

Trees – the raw material for paper – are both a renewable biomass resource and a material that can be used in myriad ways. The strength of the Nippon Paper Group is its ability to pursue a balanced group of businesses as a comprehensive biomass enterprise. We have developed a broad range of businesses from the creation of forest resources through afforestation and other means, to the

production of lumber and construction materials, paper from wood fiber, and chemicals applying wood components. We use technologies that employ wood in sophisticated ways to develop biochemicals and applications for cellulose nanofiber, a material expected to play important roles in the future. And we are striving to rapidly increase our capacity to supply electricity from previously unused woody biomass, to help satisfy energy needs that emerged following the Great East Japan Earthquake. Looking to the future as a comprehensive biomass enterprise with growth opportunities also in fields like packaging and healthcare, we take a global perspective in boldly capitalizing on opportunities and bringing a sense of urgency to the development of products in various fields.



**Fumio Manoshiro**  
President  
Nippon Paper Industries Co., Ltd.

## **Contributing to the Sustainable Development of Society by Making Full Use of and Recycling Renewable Wood Resources on a Foundation of Sustainable Forest Management**

The Nippon Paper Group manages 206,000 hectares of domestic company-owned and overseas planted forests, an area roughly equivalent to that of Tokyo Prefecture. Wood is a renewable resource, and the Nippon Paper Group, through sustainable forest management, is preserving forest ecosystems and biodiversity. Trees capture CO<sub>2</sub> and continue to hold it even after they have been harvested and processed into lumber, so the use of wood resources helps to prevent global warming.

In addition, the use of the black liquor (a woody biomass byproduct of the pulp manufacturing process) and construction waste as fuels, the recycling of paper, and other means of making full use of and recycling wood resources help to prevent resource depletion.

As a comprehensive biomass enterprise, the Nippon Paper Group contributes to the ongoing development of society by making effective use of a renewable resource to provide answers to issues facing society as a whole. We are confident, therefore, that we are pursuing a business model and strategies that allow us to grow, while responding to social needs, and are sustainable.

## **Helping to Build a Sustainable Society by Taking a Broad Perspective and Communicating with Stakeholders**

Through its management of broad areas of forest and operation of large-scale production sites, the Nippon Paper Group has impacts on both local areas and the people who live and work in them. The ability to coexist with local communities, therefore, is key to our own ongoing existence. Stakeholder opinions are invaluable for developing ways to grow sustainably together with society, and we emphasize dialogue with stakeholders in our pursuit of management that stresses the importance of CSR. Continuously communicating with stakeholders gives us an accurate understanding of what is expected and demanded of the Nippon Paper Group, and we shape our business

activities accordingly to coexist with society.

For example, in protecting the environment – a matter of unquestionable importance for coexisting with local communities – we communicate with local residents and customers, and reflect their expectations and demands not only in our daily operations and product development but also in our medium-term environmental action plan. We then follow up with highly effective environmental measures at every stage of the value chain, from procurement, to production, shipping, product usage, and recycling. These actions are based on the principles we have set out for ourselves in the Nippon Paper Group Environmental Charter, which continues to guide our practice of environmentally friendly management.

At the global level, taking a broad view of the various issues posing increasingly serious cross-border challenges, understanding the nuances of each, and working with others to find solutions are critical. And that is why Nippon Paper Industries Co., Ltd. is a participant in the United Nations Global Compact, which sets out 10 Principles with respect to human rights, labor standards, the environment, and the prevention of corruption.

Business conditions are constantly changing and there are many social issues demanding solutions. By applying the wealth of technologies it has developed over its long history, and with the dedicated and enthusiastic endeavors of its diverse workforce, the Nippon Paper Group, as a comprehensive biomass enterprise, will work with society to pioneer a new future. I expect our employees to take to heart the importance of both safety and compliance, and carry out their individual duties with a clear understanding of their role within the overall organization. And management must provide a coherent direction in which to proceed.

This report shows how we, as a comprehensive biomass enterprise, are implementing a business model that is both sustainable and closely tied to the solving of problems and pursuit of sustainable development for society. It also provides information focusing on the important steps the Nippon Paper Group has taken to coexist with local communities and society at large. We are committed to helping build a sustainable society – one that responds to the expectations and demands of our stakeholders. Your candid opinions, as well as ongoing guidance and support, will be welcomed as we move forward with this endeavor.

# Effectively Applying Sustainable Resources to Contribute to the Sustainable Development of Society

In addition to preventing global warming and protecting watersheds, forests perform a wide variety of functions such as providing shelter for diverse living creatures. As a comprehensive biomass enterprise, the Nippon Paper Group practices sustainable forest management, while also making full use of and recycling the precious resources forests represent.

## Benefits for the fight against global warming, protection of biodiversity, and prevention of resource depletion

### 1 Sustainable Forest Management

**206,000** hectares of company-owned forests worldwide — roughly equivalent to the entire area of Tokyo Prefecture

After harvesting, steps are taken to regenerate forests through replanting and coppice regeneration, which entails the growth of shoots that sprout from stumps into new trees. In this manner, every effort is being made to ensure a permanent source of forests.

#### Biodiversity conservation

Nippon Paper Industries has designated approximately 20% of its Japanese forest as “environmental forest areas.” In these areas, logging for commercial purposes is prohibited and forest biodiversity and water resources are protected. These environmental forest areas include national park lands in Akan, Nikko, and other places as well.

#### Environmental forest areas:

**18,000** hectares  
About 20% of forests owned in Japan

### 2 Carbon Neutrality (Preventing Global Warming through the Carbon Cycle)

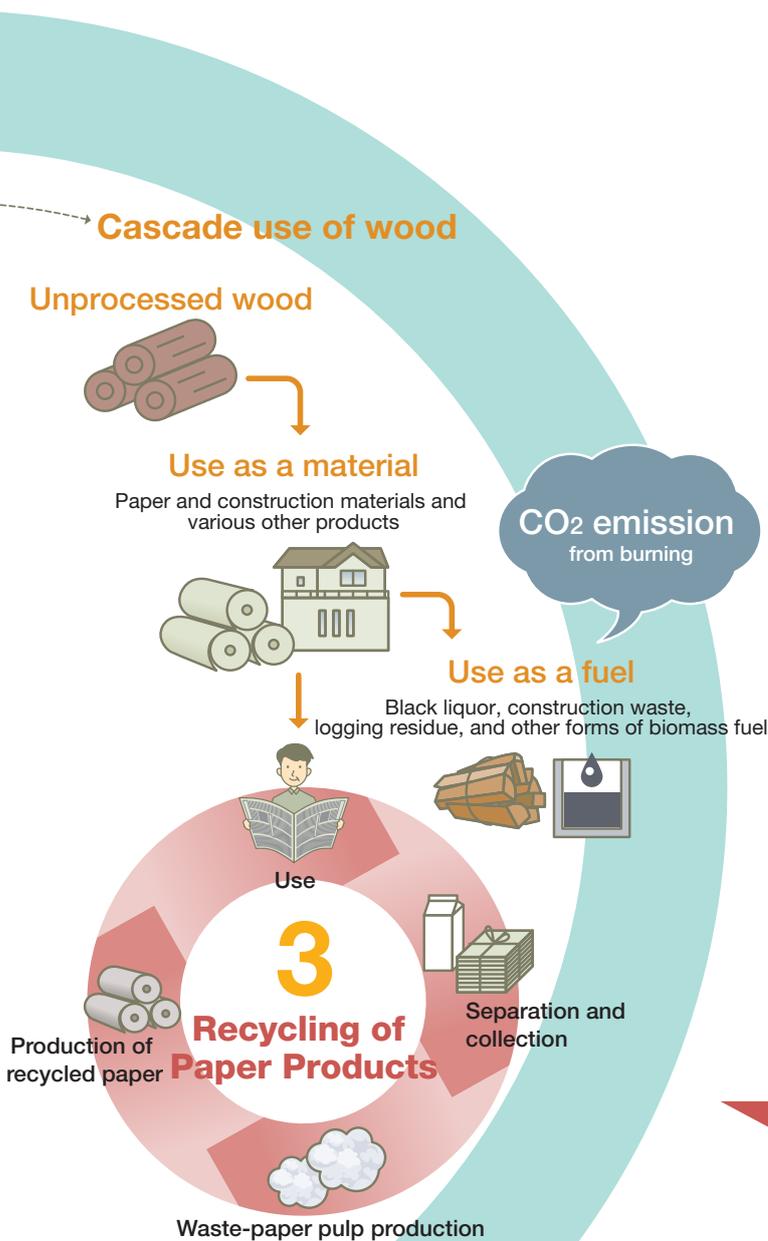
**CO<sub>2</sub> sequestered in company-owned forests worldwide: 34 million tons**

Using photosynthesis, plants absorb CO<sub>2</sub> from the atmosphere. Combusting biomass fuels, therefore, emits CO<sub>2</sub> that is offset by the CO<sub>2</sub> absorbed when the plants were growing. That means there is no net increase in atmospheric CO<sub>2</sub>. This concept, described as being “carbon-neutral,” is why it is said that biomass fuels do not promote global warming and are a fuel with a low environmental burden.

## Three Cycles Contributing to Sustainable Development



## Making full use of and recycling trees as a biomass resource



### Cascade use of trees

The Nippon Paper Group uses trees in a cascade of applications that contributes to greater resource usage efficiency by employing every bit of every tree.

### Prevention of resource depletion

Of the energy used by the Nippon Paper Group, 45% is comprised of black liquor from the pulp-making process, wood construction waste and other biomass fuels, and fuels derived from discarded tires, RPF, and other waste materials. As well as using biomass fuel, the Group is making advances in the development of biomass materials that can be used in place of petrochemical products.

### Non-fossil energy\* as a percent of total energy usage:

**45%**

\* Non-fossil energy = biomass energy+ waste energy

## 3 Recycling of Paper Products

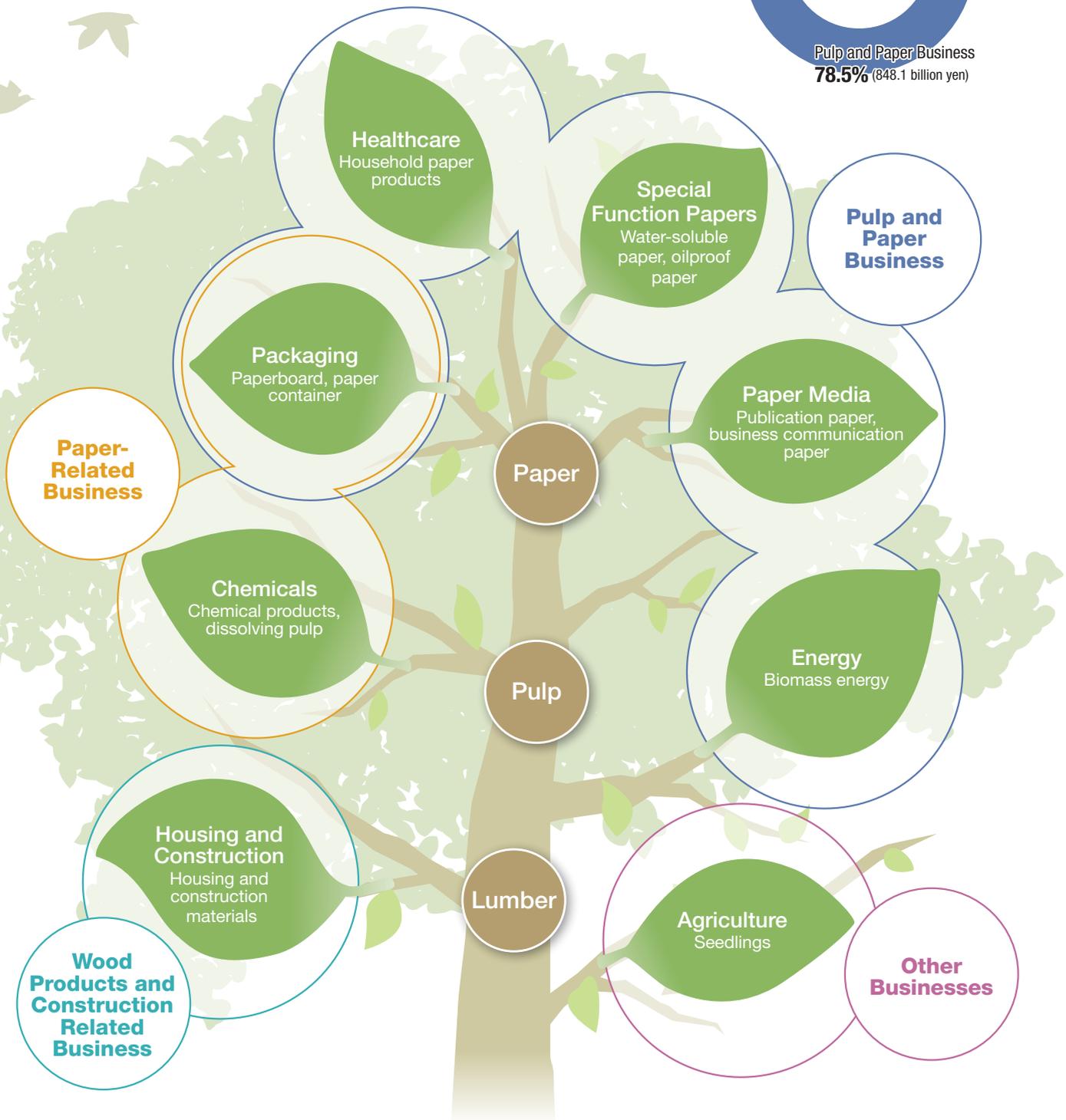
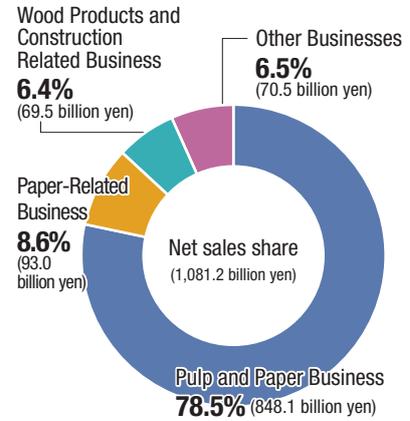
### Recycled paper utilization rate

Paper **39%** Paperboard **90%**

The Nippon Paper Group is working diligently to increase the waste paper collection rate with the support of customers and the general public. In addition to bolstering its recycled paper processing capabilities, the Group is striving to improve the quality of pulp made from recycled paper and to increase the number of applications.

# Using Renewable Wood Resources to Provide a Diversity of Products

Nippon Paper Group makes effective use of wood as a renewable resource to provide society with a broad array of products through wide-ranging businesses beginning with the Pulp & Paper Business, which makes paper, paperboard, and household paper; and extending to the Paper-Related Business, which makes paper containers and chemical products, and the Wood Products and Construction Related Business, which handles housing construction materials and other products.



## Business Segment Overview

### ● Pulp and Paper Business

#### Description of Business

Various paper, paperboard and household paper products in this core segment lead the domestic industry in production, sales volumes and quality. We are working to reorganize our production structure. At the same time, we are proactively developing overseas markets for paper and paperboard, especially in Asia and Oceania. Significant attention is also being devoted to the application of in-house power generation know-how to produce and sell electricity.

#### Principal Customers

Newspaper, publishing, printing, and stationery companies; public offices, paper manufacturers, and electric utilities



Newsprint



Printing paper



Specialty paper (teabags and other products)



Linerboard and corrugated medium



Household paper products



Electricity

### ● Paper-Related Business

#### Description of Business

Comprising this business are three segments, including paper-processing operations, which add various forms of value to paper as a raw material; the chemical products segment, which applies all wood components fully in the manufacture and sale of various types of products; and the functional film segment, which makes the most of its clean coating technology.

#### Principal Customers

Manufacturers of beverages, food, chemicals, and various types of paper processing companies



Beverage containers



Raw material for rayon



Binder for tablet forming



Food additives



Concrete dispersant



Material for LCDs

### ● Wood Products and Construction Related Business

#### Description of Business

This business includes a lumber segment that takes advantage of the same expertise we use to procure wood resources for making paper, a construction materials segment that manufactures and sells high-quality wooden construction materials and emphasizes the use of wood resources from Japan, and a civil-engineering-related segment that makes use of the technologies we have amassed for maintaining facilities at our paper mills.

#### Principal Customers

Construction materials, housing and construction companies, general consumers, and public offices



Flooring material



Interior decoration materials

### ● Other Businesses

#### Description of Business

Included here are segments that put biotechnology expertise developed in afforestation R&D to work in agricultural pursuits; apply real estate and other Group assets in sports and leisure operations; handle product and material logistics for Group companies; and produce and distribute beverages.

#### Principal Customers

Businesses and consumers



Beverage business



Leisure business

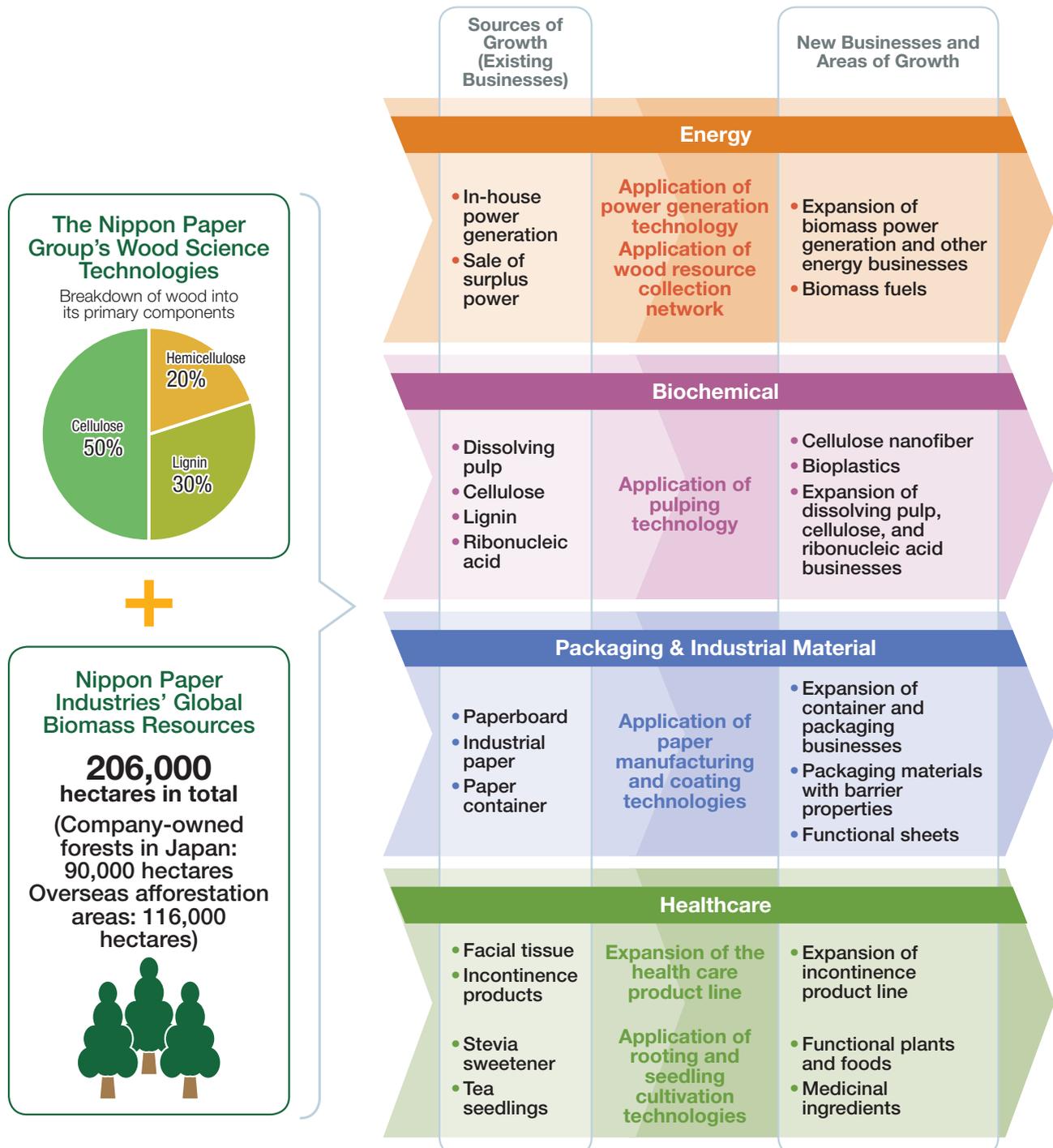
For detailed data, please refer to page 72.

## The Business Strategy of a Comprehensive Biomass Enterprise

# Applying Our Technologies and Resources to Create New Products and Businesses

The Nippon Paper Group has developed a wealth of wood science technologies as derivatives of our paper manufacturing activities. We have know-how for making use of every bit of cellulose (wood fiber), hemicellulose, and lignin (other components of wood) in the wood we process, and offer products and services that provide a diversity of value by making sophisticated use of these wood resources.

The Nippon Paper Group is moving forward with the development of new businesses, which are electric power and other forms of energy; biochemicals including cellulose nanofiber and other new materials; packaging and industrial materials encompassing containers and functional films; and health care.



## TOPICS 1 Biomass Power Generation

Black liquor, a byproduct of the pulping process, and unused wood are excellent biomass fuels. Black liquor has long been burned in boilers at paper mills to produce steam and electricity. Our plans for the future call for further expansion of our energy business by leveraging the expertise we have developed in power plant fuel procurement and management.

Nippon Paper Industries Co., Ltd., for example, is progressing with the installation of a 5,000 kW biomass power generation facility at its Yatsushiro Mill. This facility, which will be fueled solely with domestic unused wood resources, is scheduled to begin supplying power in March 2015. The wood to be used as fuel will be stably sourced from within a 50 km radius of the Yatsushiro Mill by employing a collection network already in place for gathering woodchips used as a raw material for making paper. Power from this new facility is expected to bring in annual revenues of about 1.3 billion yen.



Biomass boiler already in operation (No. 3 Biomass Boiler at Nippon Paper Industries' Fuji Mill)

## TOPICS 2 Cellulose Nanofiber

The term "cellulose nanofiber" (CNF) refers to ultrafine fibers that are isolated from wood fiber and as small as 4 nanometers (billionths of a meter) in width. Their dimensional change in response to temperature changes are as small as those of glass fiber, they are stronger than steel but as light as paper, and they excel in transparency and oxygen barrier properties. They also demonstrate uniquely high viscosity in water. CNF is expected to fulfill various roles in industrial materials, such as reinforcement of resins used in automobiles and electronics, and in additives for foods and cosmetics.

In October 2013, the Group established Japan's first production demonstration facilities (with minimum production capacity of 30 tons per year) for CNFs at the Iwakuni Mill. At present, we are distributing sample products to potential customers in a range of industries to support application development, while we work to establish the mass-production technology and reduce production costs.



Transparent sheet made from cellulose nanofiber



## TOPICS 3 Health Care Products

Nippon Paper Crecia has installed a new production line for its Poise® incontinence products and is aggressively promoting sales in television and other advertising media. Year-on-year sales growth of around 30% was achieved in fiscal 2013, and the Health Care Product Sales Division has been newly established to pursue further business expansion. Expanding production facilities further, while extending the product line with offerings such as Poise® Liner Attach Guard incontinence products for men, Nippon Paper Crecia is prepared to vigorously invest business resources in both sales and R&D.

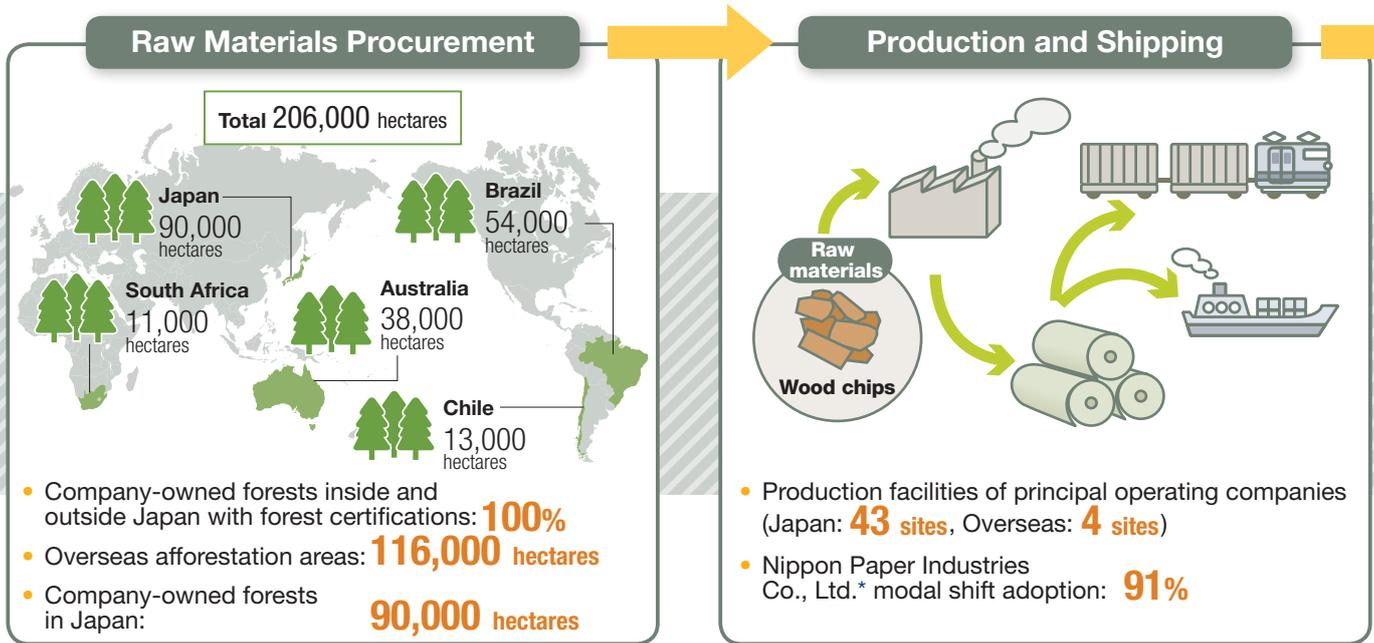


Poise® Pad Super Slim



Poise® Liner Attach Guard

# Addressing Social Issues via the Value Chain

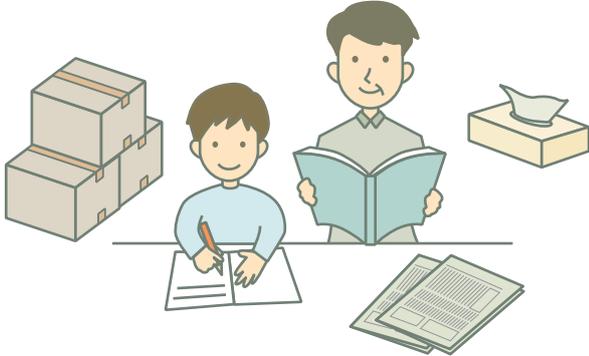


\* Pulp and paper operations

## Overview of the Nippon Paper Group's Initiatives Addressing Social Issues

Social Issues	ISO 26000 Core Subjects	Pages in Sustainability Report 2014	Raw Material Procurement
Management Responsibility	Organizational Governance, Fair Operating Practices	15–20	←
Forest Management, Raw Material Procurement, and Environmental Responsibility	The Environment	21–50	<ul style="list-style-type: none"> <li>Sustainable forest resource procurement (Efforts to procure certified material, confirm legitimacy, pursue afforestation overseas, obtain certifications for company-owned forests, and use domestic materials)</li> <li>Protection and nurturing of company-owned forests in Japan (Biodiversity protection and other efforts to maintain the diversity of roles played by forests)</li> </ul>
Customer Responsibility	Consumer Issues	51–56	←←
Human Rights, Employment and Labor Responsibility	Human Rights, Labor Practices	57–66	<ul style="list-style-type: none"> <li>Confirmation of suppliers' actions in respecting human rights (Conduct of an annual supplier survey)</li> <li>Respect for human rights in the company's forest management (Consideration of the rights of indigenous people, prohibitions against forced labor and child labor, etc.)</li> </ul>
Community Responsibility	Community Involvement and Development	67–71	<ul style="list-style-type: none"> <li>Coexistence and co-prosperity with communities adjacent to overseas afforestation areas (Job creation, education support, contributions to local environments, cultural preservation, promotion of safety and disaster preparedness, etc.)</li> <li>Contributions that make use of company-owned forests for the benefit of local areas and communities (Environmental education that makes use of company-owned forests, etc.)</li> </ul>

## Sales and Usage



### • Domestic production share for principal products\*

Newsprint:	<b>35%</b>	Sanitary paper:	<b>13%</b>
Publication paper, business communication paper:	<b>30%</b>	Paperboard:	<b>15%</b>

\* Based on data from the Paper and Paperboard Statistics Yearbook 2013 published by the Japan Paper Association.

## Separation, Collection, Recycling, and Disposal



### • Recycled Paper Usage (Japan)

Paper:	<b>39%</b>
Paperboard:	<b>90%</b>

## Value Chain Initiatives

Production	Shipping	Sales and Usage	Separation, Collection, Recycling, and Disposal
Corporate governance, CSR management, thorough compliance, effective information disclosure, and stakeholder dialogue			
<ul style="list-style-type: none"> <li>Efforts to fight climate change</li> <li>Lowering of environmental burden (Water quality, atmosphere, waste, noise, vibration, odor, etc.)</li> <li>Proper management of chemical substances</li> <li>Development and production of eco-friendly products</li> </ul>	<ul style="list-style-type: none"> <li>Increase in load efficiency (Promotion of modal shifts)</li> <li>Shortening of transportation distances (Pursuit of direct delivery and reorganization of distribution warehouses)</li> </ul>	<ul style="list-style-type: none"> <li>Provision of eco-friendly products</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of recycled paper usage (Strengthening of waste paper processing capacity, expansion of use of unutilized waste paper, improvement of recycled paper pulp quality)</li> <li>Promotion of waste paper collection</li> </ul>
<ul style="list-style-type: none"> <li>Stable supplies of products</li> <li>Ensuring quality and safety</li> </ul>		<ul style="list-style-type: none"> <li>Ensuring safety in use</li> <li>Pursuing customer satisfaction</li> <li>Appropriate disclosure of product information</li> <li>Addressing customer questions, complaints, and opinions</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of waste paper collection together with customers (Support for recycling organizations, establishment of waste paper collection facilities, etc.)</li> </ul>
Dealing with climate change			
Appropriate information disclosure, promotion of communication, and environmental education activities			
<ul style="list-style-type: none"> <li>Respect for basic human rights</li> <li>Hiring practices that respect human rights</li> <li>Securing diversity in the workforce</li> <li>Human resource development</li> <li>Ensuring occupational safety and health, and disaster preparedness</li> </ul>	<ul style="list-style-type: none"> <li>Ensuring safety in shipping (Promotion of transportation safety)</li> </ul>	<ul style="list-style-type: none"> <li>Management of customers' personal information</li> </ul>	
<ul style="list-style-type: none"> <li>Coexistence and co-prosperity with areas surrounding mills (Job creation, education support, contributions to local environments, cultural preservation, promotion of safety and disaster preparedness, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of impacts of shipping (Promotion of transportation safety, adoption of low emission vehicles, promotion of noise abatement measures)</li> </ul>		<ul style="list-style-type: none"> <li>Working with local communities to promote waste paper collection</li> </ul>
Promotion of appropriate information disclosure and communication			

# Defining CSR Materiality in Light of Our Business Characteristics

## CSR Materiality in Our Value Chain (Addressed on P12-13)

ISO 26000 Core Subjects	Materiality
Organizational Governance, Fair Operating Practices (Management Responsibility)	<ul style="list-style-type: none"> <li>Stakeholder dialogue</li> </ul>
The Environment (Forest Management, Raw Material Procurement, and Environmental Responsibility)	<ul style="list-style-type: none"> <li>Sustainable forest resource procurement</li> <li>Biodiversity protection</li> <li>Efforts to fight climate change</li> <li>Lowering of environmental burden</li> <li>Proper management of chemical substances</li> <li>Promotion of waste paper collection and recycled paper usage</li> </ul>
Consumer Issues (Customer Responsibility)	<ul style="list-style-type: none"> <li>Provision of eco-friendly products</li> <li>Addressing customer questions, complaints, and opinions</li> </ul>
Human Rights, Labor Practices (Human Rights, Employment and Labor Responsibility)	<ul style="list-style-type: none"> <li>Ensuring occupational safety and health, and disaster preparedness</li> </ul>
Community Involvement and Development (Community Responsibility)	<ul style="list-style-type: none"> <li>Coexistence and co-prosperity with communities adjacent to overseas afforestation areas</li> <li>Coexistence and co-prosperity with areas surrounding mills</li> </ul>

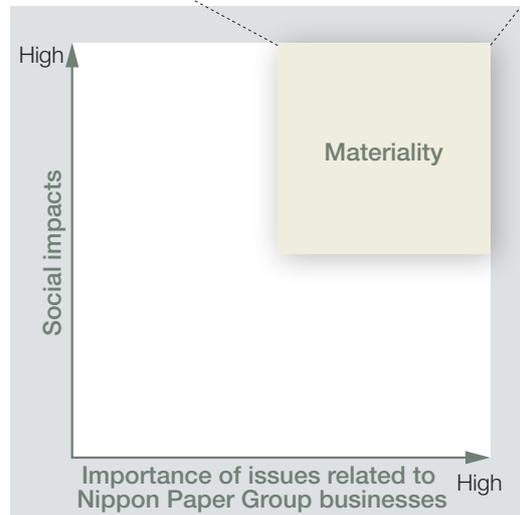
The Nippon Paper Group, working from a foundation of sustainable forest management, pursues sustainable growth as a comprehensive biomass enterprise making full use of and recycling renewable wood resources.

We have a social responsibility to use renewable resources to contribute to the sustainable development of society.

Proper management can make forests into sustainable resources and enable the preservation of forest ecosystems and biodiversity. Sequestering CO<sub>2</sub> in forests and using wood resources helps to fight global warming. And using, recycling, and regenerating wood resources prevents their depletion.

Creating new products and expanding our activities as a comprehensive biomass enterprise, the Nippon Paper Group manages and operates the expansive forests and the large-scale production sites, and has a significant impact on the local areas and people who work there. Coexistence with these communities, as well as minimizing environmental impacts and securing the safety and health of our local employees, therefore, are critical to our own continued existence.

Moreover, the opinions of our stakeholders serve as important opportunities to grasp issues that are important for coexisting and growing with society in a sustainable way.



Therefore, the materiality items given above are of particular importance to society in managing our value chain (see pages 12-13).

In identifying these material issues, from the perspectives of social impacts and the importance of issues related to our businesses, we also considered survey results reflecting the input of Nippon Paper Group employees.

# Management Responsibility



## Materiality

### ● Dialog with Stakeholders

The opinions of stakeholder are important for bringing attention to issues that could affect the Nippon Paper Group's coexistence with society and efforts to grow sustainably. Great emphasis, therefore, is placed on dialogue with stakeholders.

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# Group Governance and Information Disclosure

Increasing transparency and practicing fair management

## Corporate Governance Structure

Working to enhance management efficiency and credibility

The company's Board of Directors is comprised of eight internal directors and one outside director, for a total of nine directors, as of June 27, 2014. It is responsible for deciding on the basic policies of the Group companies, matters pertaining to laws and regulations, Articles of Incorporation, and other critical management issues, and also monitoring the executive aspects of Group companies.

The Management Execution Committee meets weekly to support the business execution activities of the representative directors, and undertake discussions of important operational matters. The Management Strategy Committee meets as needed to discuss management strategies for particular business areas, and other matters of importance for the Group.

The Board of Corporate Auditors monitors the company's management. Two of the four auditors comprising the board are outside auditors responsible for strengthening the board's monitoring and auditing functions from a third-party perspective.

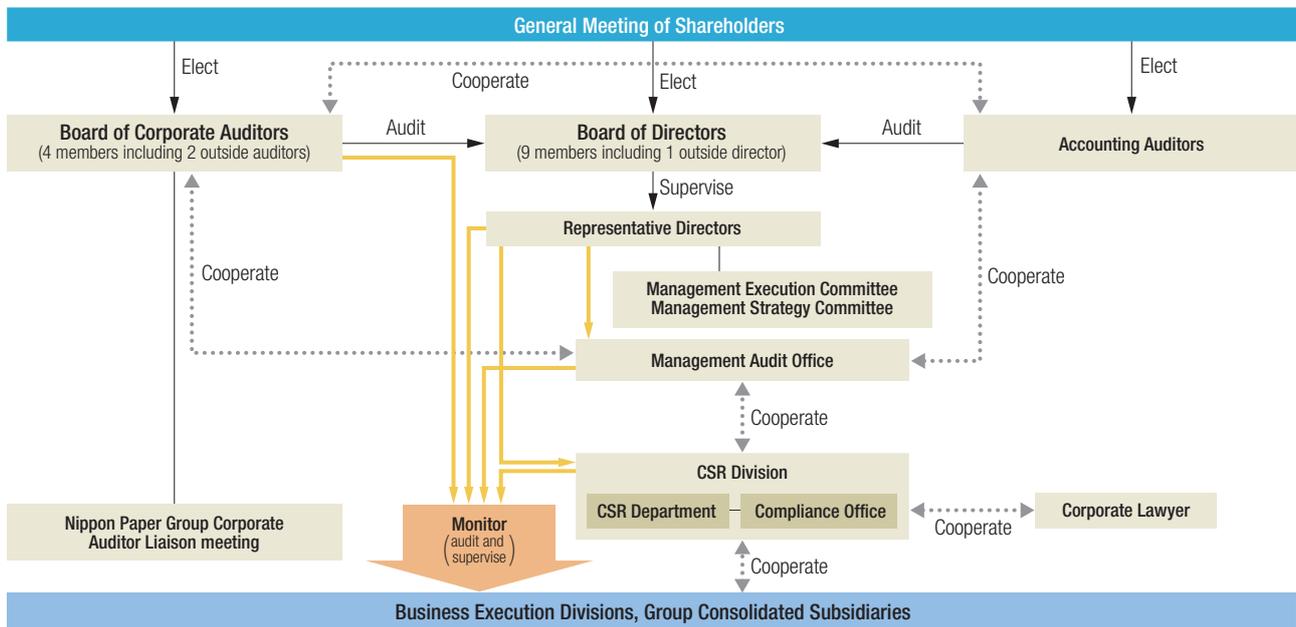
## Internal Control System

Complying with statutory and regulatory requirements

In accordance with the Companies Act and related regulations, effective internal control systems have been constructed and systems for ensuring compliance with laws and the Articles of Incorporation have been established and implemented.

To comply with the internal control reporting system requirements stipulated under the Financial Instruments and Exchange Act of Japan, the Management Audit Office assesses the status and operation of financial reporting internal controls. Covered by these assessments are the 25 consolidated subsidiaries of Nippon Paper Industries Co., Ltd.—at an overall company level—and two major Group companies—at a more detailed level paying particular attention to the net sales, accounts receivable and inventory administration processes, which are of special import to business objectives. These assessments helped confirm the efficacy of the Group's internal control and financial reporting systems as of the end of fiscal 2013.

### Corporate governance structure



#### Comment

**Monitoring management from the perspectives of compliance, CSR, and the interests of general shareholders**  
Yoshimitsu Aoyama, Outside Director, Nippon Paper Industries Co., Ltd.

In June 2013, I was elected to fill the position of outside director and strengthen the Nippon Paper Group's corporate governance by contributing to the separation of business operations from management oversight. As a legal scholar, I apply my experience in matters of law to monitor the Board of Directors' activities and call attention to potential compliance issues, CSR issues, and questions concerning the interests of general shareholders, from an outside perspective.



## Basic Position on Information Disclosure

### Ensuring management transparency through active information disclosure

The Nippon Paper Group recognizes that open and fair disclosure to a broad stakeholder base is a key responsibility of management. In this regard, we work diligently to engage in sound and highly transparent management by disclosing company information in accordance with our Action Charter (see page 18). To guide us in our endeavors, we formulated the Nippon Paper Group Disclosure Policy in October 2005.

Following the guidelines of this basic policy, we comply with the provisions of the Financial Instruments and Exchange Act of Japan and other relevant laws and regulations. We also adhere to the prompt disclosure rules stipulated by financial instrument exchanges, and disclose information in a timely manner, standing on the principles of transparency, fairness and continuity. Furthermore, we disclose information that may not be required under applicable laws, regulations, or timely disclosure rules, when deemed to be of interest to our stakeholders and other members of society.



Information Disclosure Policy

<http://www.nipponpapergroup.com/english/ir/disclosure/policy/>

### The Nippon Paper Information Disclosure Policy (Excerpt)

#### 1. Basic Disclosure Stance

The Nippon Paper Group (the Group) pursues a fundamental policy of disclosing corporate information proactively and fairly to all Group stakeholders, and raising the level of management transparency in accordance with its Action Charter and Codes of Conduct.

#### 2. Criteria for Disclosure

- (1) The Group conducts expeditious disclosure based on the principles of transparency, fairness and consistency, in line with the Japanese Corporate Law, Securities and Exchange Law<sup>1</sup> and other relevant laws, as well as the Rules on Timely Disclosure of Corporate Information by Issuer of Listed Security (the Rules on Timely Disclosure) stipulated by securities exchanges.<sup>2</sup>
- (2) Even for information that does not fall under the categories stipulated in the relevant laws and the Rules on Timely Disclosure, the Group carries out rapid and accurate disclosure of information useful to stakeholders and the broader society, to the fullest extent possible, regardless of any advantages or disadvantages that may accrue to the Group as a result of such information disclosure.

<sup>1</sup> Currently the Financial Instruments and Exchange Law

<sup>2</sup> Currently the financial instruments exchange

## Compensation Paid to Directors

### Determined on the basis of responsibilities and performance

Compensation paid to directors is essentially composed of two parts. Seventy percent is paid as a base component and the remaining 30% is, in principle, linked to the business results of the preceding fiscal year.

Compensation paid to corporate auditors is limited to a fixed amount in view of their responsibilities. This amount is determined through a process of deliberation by the auditors.

The payment of compensation to directors and corporate auditors is restricted to the total amounts approved at the general meetings of shareholders.

#### Directors' total compensation

Officer class	Total compensation payable
Directors	¥800 million per year
Corporate auditors	¥120 million per year

## IR Activities

### Promoting dialogue with shareholders and investors

Nippon Paper Industries expends great effort in providing to its shareholders and investors a direct explanation of the status of the Group's management and business through shareholders' meetings, various types of briefings, individual meetings, and other presentation opportunities. At the same time, we actively listen to the comments and concerns of shareholders and investors, and incorporate what we learn into ongoing management.

#### Results of activities in fiscal 2013

Operating results and management briefings	2 times
Operating results briefings (Teleconference)	2 times
Individual meetings	326 times
Seminars for individual investors	1 time

#### Tours and other events

Every opportunity is taken to promote a deeper understanding of the Nippon Paper Group and its activities. Annual plant tours are one example. The tours of Nippon Paper Industries' Ishinomaki Mill in fiscal 2013 attracted considerable praise from participants.

#### Trends in dividends per share

(Yen)

Company name	Fiscal year end	Interim dividend	Period-end dividend
Nippon Paper Group, Inc.	March 2011	40	20
	March 2012	10	20
	March 2013	10	—
Nippon Paper Industries Co., Ltd.*	March 2013	—	30
	March 2014	10	30

\* Nippon Paper Industries Co. Ltd. and Nippon Paper Group, Inc. merged on April 1, 2013.

# CSR Management

The CSR Division executes corporate social responsibility initiatives.

## Management Structure

### Overseeing corporate social responsibility through a dedicated CSR Division

The Nippon Paper Group, in striving to achieve ongoing growth as a comprehensive biomass enterprise, works to meet the expectations and requirements of stakeholders and fulfill corporate social responsibilities from a variety of perspectives. In this Sustainability Report, we provide information in six areas: Managing on various fronts; managing forests and procuring raw materials; the environment; customers; human rights, hiring, and workers; and local areas and society.

Nippon Paper Industries Co., Ltd. established the CSR Division to oversee the CSR activities of the Group as a whole. The CSR Department and Public Relations Office were set up within the CSR Division. The CSR Department promotes CSR activities based on the shared values embodied in the Action Charter and works closely with the various divisions and departments.

### Meeting social responsibilities through business activities



## The Nippon Paper Group's Action Charter

### Action Charter

1. We shall pursue a sustainable growth for the future to contribute to society through our business activities.
2. We shall abide by the letter and the spirit of laws and regulations, and comply with the highest ethical standards and social codes of conduct, both in Japan and abroad.
3. We shall conduct our business in a fair, transparent and liberal manner.
4. We shall win the trust of customers through the development and provision of socially useful and safe products and services.
5. We shall disclose corporate information positively and fairly to all stakeholders of the Group.
6. We shall actively address environmental issues, and shall endeavor to conserve and enhance the environmental state of our planet.
7. We shall maintain consistency between corporate development and the personal contentment of individual employees, and create a company filled with dream and hope.

### Supporting CSR activities by Group companies

Nippon Paper Industries Co., Ltd.'s CSR Department hosts regular CSR liaison meetings with personnel in charge of CSR at principal Group companies. These meetings are held to communicate directions being taken with regard to CSR matters and to share information. They are also used as opportunities to hear discussions of CSR trends by invited consultants, and to hold "business and human rights" workshops moderated by a representative of Amnesty International Japan.

### Collaborative Initiatives

#### Seeking to connect to and work with external parties

The Nippon Paper Group is striving to build relationships of genuine coexistence with its stakeholders. Accordingly, we are working to share CSR-related information with other companies, international organizations, governmental institutions, labor organizations, and NGOs in countries around the world, and contribute to various activities together with these partners.



Network Japan  
WE SUPPORT

### The United Nations Global Compact

Nippon Paper Industries Co., Ltd. announced its decision to support the 10 principles covering the four fields of human rights, labor, environment and anti-corruption and joined the United Nations Global Compact as a signatory in November 2004.

 [United Nations Global Compact  
https://www.unglobalcompact.org/](https://www.unglobalcompact.org/)

# Compliance

As a committed partner ensuring that employees are fully informed about compliance, the Nippon Paper Group engages in corporate activities in accordance with laws and social norms.

## Compliance Structure

### Promoting compliance throughout the Group

The CSR Division of Nippon Paper Industries Co., Ltd., which was established to promote strict compliance, serves as a facilitator and driving force behind efforts to achieve the two major compliance-related goals of imbuing the Group with zero tolerance of misconduct and transforming the corporate structure and culture.

A person is appointed to be in charge of compliance within each Group company, and Nippon Paper Industries' Compliance Office actively hosts Group Compliance Liaison Meetings to provide all employees in charge of compliance with details of compliance policies, initiatives, and other information, as well as advice on education and training activities. Through these and other means, we are making every effort to promote Group-wide compliance.

### Implementing compliance training

The Nippon Paper Group conducts training on an ongoing basis to further enhance compliance awareness and understanding. We invite a consultant from outside the Group to augment our compliance programs. And we conduct training that involves group discussions and is tailored to the specific needs of production sites and sales offices.



Compliance training

## Personal Information Protection

### Ensuring protection and appropriate handling of personal information through a systematic structure and rules

Nippon Paper Industries has taken steps to ensure clear understanding of the structure and rules applicable to the handling of personal information. Handling of the personal information of customers, business partners and employees is governed by clearly stated rules and a manual, and the personal information held by individual departments is tracked and managed in control ledgers as required by the Private Information Protection Law. These ledgers contain details of the dates when personal information was obtained and the purposes for holding it, and are reviewed annually to eliminate data for which the holding period has expired and take other actions, as well, to ensure that information is handled properly.

## Respect for Intellectual Property

### Heightening respect for intellectual property and ensuring compliance with all applicable laws through education programs

The Nippon Paper Group's emphasis on intellectual property is evident not only in research and development, but also in all of its business activities. In order to instill an appreciation of the value of intellectual property and to promote strict adherence to all applicable laws and regulations, members of the Intellectual Property Department of Nippon Paper Industries conduct intellectual property education programs for the benefit of Group company employees. A total of 518 employees attended the 12 programs implemented in fiscal 2013.

## Group Internal Whistleblower System

### Encouraging reporting via a help line on activity in conflict with compliance

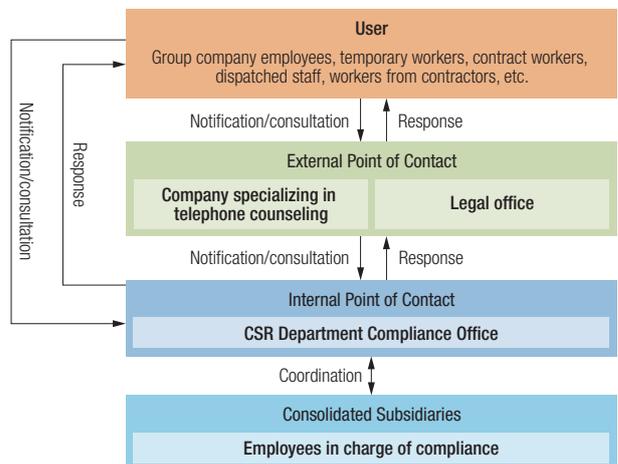
The Nippon Paper Group has established its help line system to allow any employee of the Group to provide direct notification of, or seek advice outside the chain-of-command on, any action in the workplace that could violate laws, social norms or corporate ethics. The Compliance Office located within the CSR Department serves as a point of contact within the Group. We have also taken steps to establish points of contact outside the Group for use by employees as appropriate.

The help line system guarantees the privacy of whistleblowers and protects them from any disadvantageous treatment after notification or consultation.

### Trends in the number of notifications received by the help line

Fiscal 2010	Fiscal 2011	Fiscal 2012	Fiscal 2013
11	15	13	21

### Flow of the help line system



# Dialog with Stakeholders

Actively creating opportunities for dialog to promote coexistence with society

## Basic Stance

### Actively promoting dialog

The Nippon Paper Group manages broad areas of forest and operates large-scale production sites. Coexistence with the places where we pursue business activities, and with society at large, therefore, is in our own vital interest, and dialogue with stakeholders is critical for understanding what coexistence demands.

In this context, we actively establish contact points and opportunities for direct dialog with all stakeholders while regularly providing information on our operations and promoting the exchange of opinions. Each of our business locations actively creates opportunities for regular communication on risks and other matters. And stakeholder opinions are received through channels such as our website and *ShikiOriori*, the CSR communication magazine we publish to provide plain and simple explanations of our CSR initiatives.

Stakeholder opinions are carefully considered and reflected in management decision making aimed at enabling the mutually beneficial ongoing development of society and the Nippon Paper Group.

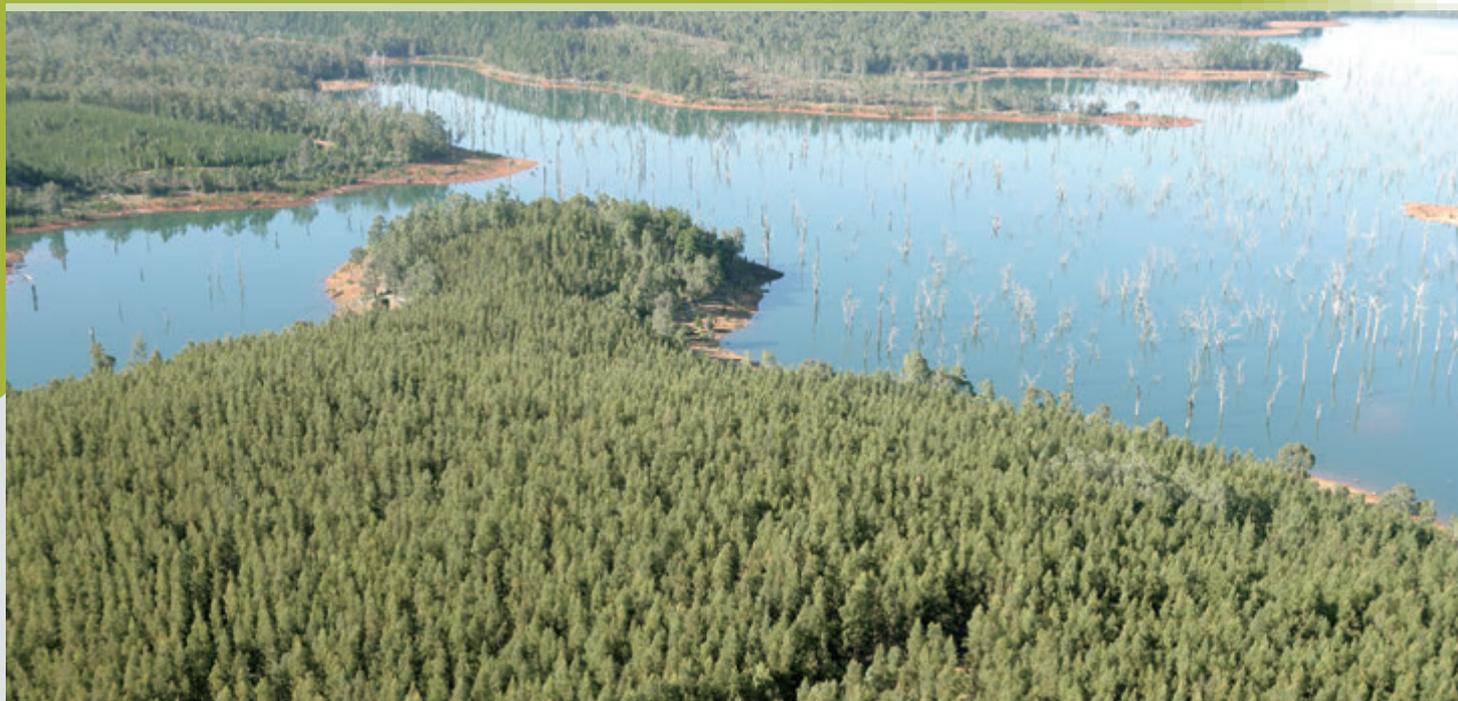


CSR communication magazine *ShikiOriori*

### Contact points for dialog with stakeholders

Stakeholder	Major point of contact	Means of communication
<b>Employees (executives, permanent employees, part-time employees, employee families)</b> The 13,107 employees (consolidated basis) of the Nippon Paper Group are responsible for business and CSR activities. Working closely with the labor union, the principal mouthpiece for the Group's employees, we make every effort to ensure that our employee evaluation and compensation systems are fair, and to provide a rewarding and comfortable workplace. In addition, we provide a variety of benefits, including medical examinations covering employees and their dependents in an effort to foster peace of mind and garner the trust of employee families.	Human resource sections	Labor-management councils, labor-management committees, etc.
<b>Customers (business enterprises, consumers, etc.)</b> Paper, the Nippon Paper Group's principal product, is widely used by both companies and individuals. Paper products are for the most part delivered to the corporate customers: wholesale trading companies, printing companies and publishers in Japan. In addition, household paper and leisure services are provided for individual customers (consumers). We are putting in place the necessary structures and systems by product and service that best address the needs of customers.	Sales sections Product safety sections Customer relations	Individual interviews, inquiries to customer relations sections, etc.
<b>Society and local residents (local communities, NPOs/NGOs, municipalities, the media, students, etc.)</b> The business activities of the Nippon Paper Group's production bases have a major impact on surrounding communities. We, therefore, place significant weight on promoting harmonious co-existence with local residents, protecting the natural environment and garnering the trust of society. We are also acutely aware that the activities of NPOs and NGOs, both in and outside Japan, reflect the interests and concerns of society. Through dialog and support, we are working to foster deeper mutual understanding. Moreover, we acknowledge the importance of the media in ensuring accountability to the broader society. In this regard, we are actively engaged in information disclosure.	Responsible sections within mills and branches	Environmental explanatory meeting, risk communication, environmental monitoring system, mill and other presentation meetings, etc.
	Responsible sections within each business segment	Interviews, etc.
	Social contribution sections	Social contribution activities, etc.
	Public relations sections	Press releases, interviews, etc.
<b>Business partners (suppliers, subcontractors, etc.)</b> While the majority of business partners are companies domiciled in Japan, items such as woodchips and fuel are mainly procured from overseas suppliers. Moving forward, relationships with business partners are expected to increasingly take on a global nature. The Nippon Paper Group engages in open and fair trading transactions while promoting positive relations with its business partners. In addition, responding to the confidence customers place in us, we work closely with business partners to pursue CSR activities throughout the supply chain.	Procurement sections Human resource sections	Individual interviews, etc.
<b>Shareholders (shareholders, investors, etc.)</b> Shares of Nippon Paper Industries Co., Ltd. are listed on the Tokyo Stock Exchange. Financial institutions and foreign investors held 46% and 22%, respectively, of the 16,250,000 shares issued by the company as of March 31, 2014. Nippon Paper Group, Inc. strives to disclose information in a timely, transparent, fair and continuous manner.	General affairs sections IR sections	General shareholders' meetings, shareholder communications, explanatory meetings, annual reports, IR site, IR information mail, etc.

# Forest Management and Raw Material Procurement Responsibility



## Materiality

### ● Sustainable Procurement of Raw Materials

The Nippon Paper Group, as a comprehensive biomass enterprise, pursues business endeavors that are founded on sustainable forest management and promote sustainable growth by using, and later recycling, every bit of the renewable wood resources it harvests.

As such, we have a social responsibility to contribute to the sustainable development of society by making effective use of wood resources, which are renewable.

With proper forest management, forests can be used as a sustainable resource, and forest ecosystems and biodiversity can be protected. Because forests act to sequester CO<sub>2</sub>, using wood resources actually helps to prevent global warming.

At the Nippon Paper Group, therefore, we treat the sustainable procurement of raw materials as one of our highest priorities.

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# Policy and Management

Practicing sustainable raw materials procurement that takes into consideration environmental and social concerns based on our philosophy and basic policy

## Basic Stance

### Pursuing sustainable and stable wood resources procurement

Woodchips, which are the main raw materials for pulp and paper, are derived from forests that are deeply intertwined with the global environment and ecosystems. Procurement entails the support not only of suppliers in and outside of Japan, but also the communities and government authorities of local production areas. Taking into consideration the impact on the environment and society, the Nippon Paper Group recognizes the importance of working closely with suppliers to establish a sustainable supply chain that incorporates production area forest ecosystem, local community, occupational safety and health as well as other concerns.

Accordingly, we are endeavoring to build a structure and framework that will allow us to sustainably procure renewable wood resources.

## Philosophy and Basic Policy

### Putting in place a philosophy and basic policy that reflects the opinions of stakeholders

The Nippon Paper Group established its Philosophy and Basic Policy Concerning Raw Materials Procurement in fiscal 2005. In formulating this philosophy and basic policies, a draft proposal was released to the public so as to solicit the opinions of stakeholders in Japan and overseas. The Group considered all of the close to 2,000 comments received, and incorporated several suggestions into revisions made to the draft.

## Sustainable Forest Management

### Practicing proper planning and management

Forestry management considers not only economic, but also environmental and social sustainability. The Nippon Paper Group defines sustainable forest management as:

- 1) Biodiversity is conserved.
- 2) The productivity and soundness of the forest ecosystem is maintained.
- 3) Soil and water resources are conserved.
- 4) Diverse social needs are satisfied.

Proper planning and management are important factors in the sustainable management of forests. A considerable amount of time is required to cultivate trees to their maturity. In putting together a viable sustainable forest management plan, it is important to consider factors including the areas allocated to afforestation and harvesting, the rate of growth, the surrounding environment and the impact on society. Landscape concerns related to efforts to protect waterside forests and address other such needs must also be examined. Taking full advantage of its expertise in forest management, the Group is promoting proper planning and management.

## Framework for Promoting Raw Materials Procurement Management

### Overseeing raw material procurement for the entire Group

The Nippon Paper Group established the Raw Materials Committee, chaired by the general manager of the Raw Materials and Purchasing Division at Nippon Paper Industries. This subcommittee deliberates on a wide variety of important issues concerning raw material procurement, including the Group's overarching procurement policy.

### Philosophy and Basic Policy Concerning Raw Materials Procurement

(formulated on October 5, 2005)

#### Philosophy

We are committed to establishing a reliable raw materials procurement system through global supply chain management in consideration of the environment and society.

#### Basic Policy

##### 1. Environmentally friendly raw materials procurement

- (1) We procure woodchips, lumber and pulp from forests under sustainable forest management.
- (2) We use and deal in no illegally logged lumber and we support the eradication of illegal logging.
- (3) We make active use of recycled materials to help build a recycling-oriented society.
- (4) We make appropriate procurement of chemical substances in compliance with relevant laws and regulations.
- (5) We build traceability systems to ensure the above policies are practiced throughout the supply chain.

##### 2. Socially aware raw materials procurement

- (1) We pursue fair deals with suppliers on equal terms.
- (2) We ensure that the entire supply chain has appropriate human rights and labor practices.

##### 3. Promotion of dialogues with stakeholders

- (1) We engage in dialogues with stakeholders to improve the quality of our raw materials procurement in constant consideration of the environment and society.
- (2) We proactively disclose information so that our initiatives are better known.

# Current Status of Raw Materials Procurement

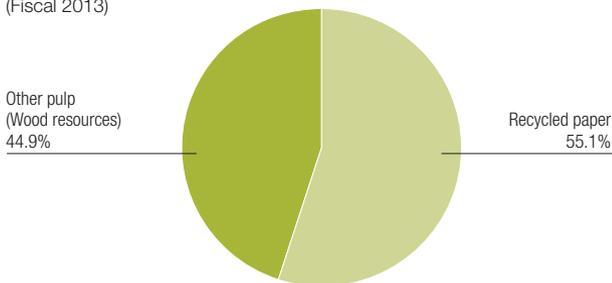
In addition to actively promoting the use of recycled paper, we procure wood resources from sustainably managed forests.

## Current Status of Paper Raw Materials Procurement

### Using waste paper and wood resources as raw materials

The Nippon Paper Group is engaged primarily in the manufacture of paper products. Fifty-five percent of the raw materials are composed of recycled paper and the remaining 45% consists of such wood resources as woodchips. Both types of raw materials are used to produce pulp.

**Breakdown of raw materials for paper manufacturing\***  
(Fiscal 2013)



\* The Group in Japan

## Initiatives aimed at stable waste paper procurement

The collection of waste paper has taken on greater importance with each passing year. This is attributable not only to government initiatives aimed at reducing the volume of waste, but also to measures designed to promote the recycling of resources. Waste paper is an essential resource accounting for more than 60% of the raw materials used by Japan's paper industry.

Against this backdrop, the Nippon Paper Group has maintained a stable system for procuring waste paper. This system, the product of many years of collaboration with the waste paper industry, promotes the recycling of waste paper.

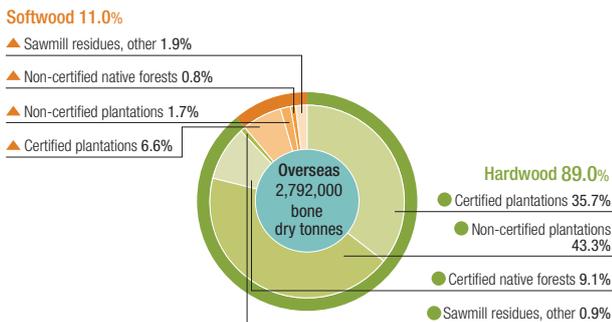
## Initiatives aimed at stable wood resource procurement

Nippon Paper Industries is responsible for procuring wood raw materials for the Group. Around two-thirds of the wood resources are procured from overseas and one-third sourced from Japan. The Oceania region including Australia is a main source for overseas hardwood and softwood, and accounts for 37% and 76%, respectively.

**Breakdown of wood raw materials procurement (Fiscal 2013) (Nippon Paper Industries Co., Ltd.)** (tonnes=bone dry tonnes)

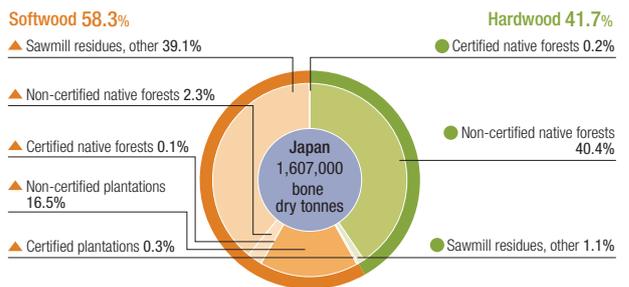


### Breakdown of wood raw materials procured from overseas



\* "Certified" refers to a forest management certification (see page 25).

### Breakdown of wood raw materials procured from Japan



**Tree species Nippon Paper Industries Co., Ltd. procured from overseas, and their countries of origin (Fiscal 2013)** (tonnes=bone dry tonnes)

Hardwood			
Country	1,000 tonnes	Percentage	Species
Australia	908	36.5%	Eucalyptus
South Africa	569	22.9%	Eucalyptus
Brazil	513	20.6%	Eucalyptus, Acacia
Chile	363	14.6%	Eucalyptus
Vietnam	133	5.3%	Acacia
<b>Total</b>	<b>2,486</b>	<b>100.0%</b>	

Softwood			
Country	1,000 tonnes	Percentage	Species
Australia/New Zealand	233	76.1%	Radiata pine
U.S.A.	69	22.5%	Douglas fir
Russia	4	1.4%	Yezo spruce
<b>Total</b>	<b>306</b>	<b>100.0%</b>	

# Sustainable Procurement of Raw Materials

Practicing sustainable forest management emphasizing legal compliance and using certifications as benchmarks

## Basic Stance

### Focusing on legal compliance and transparency in the procurement of raw materials

The Nippon Paper Group is a strong advocate of sustainable raw materials procurement that takes into consideration environmental and social concerns. Our procurement of wood resources rests on the principles of legality and sustainability, on that basis we emphasize clear identification of the origin of wood resources and the maintenance of full accountability.

When purchasing from external suppliers, we make every effort to enhance our supply chain management capabilities, taking into consideration society's needs and the environment. At the same time, we strive to develop a system that is conducive to reliable procurement and employ third-party forest certification programs to benchmark the adequacy of raw materials procurement.

In the context of procurement from company-owned forests, we pursue overseas afforestation projects to increase our plantation timber procurement. Moreover, we practice sustainable forest management by acquiring forest certifications for company-owned forests both in Japan and overseas.

### Sustainable wood resources procurement

- Sourcing from sustainable forests (sustainability)
- Clearly identifying the origin of timber (traceability)
- Maintaining full accountability (accountability)

## Action Plan for Wood-Based Raw Material Procurement

### Strictly prohibiting purchases from illegal logging while promoting procurement that takes into consideration society's needs and the environment

The Nippon Paper Group has put in place its Action Plan for Wood-based Raw Material Procurement based on the Group's Philosophy and Basic Policy Concerning Raw Materials Procurement. This action plan provides a roadmap that incorporates checks on the legality of woodchips, allowing the Group to practice CSR procurement. This action plan also helps enhance traceability with respect to woodchips procured from overseas while placing considerable emphasis on trade association certification of the legality of woodchips produced in Japan.



Action Plan for Wood-Based Raw Material Procurement  
<http://www.nipponpapergroup.com/csr/forest/procurement/actionplan/index.html> (Japanese only)

### Confirming the legality of imported woodchips

In procuring wood from overseas suppliers, document verifications are performed on a vessel-by-vessel basis to ensure that the area where the wood was harvested and the supplier of the wood are in compliance with relevant laws, and that no illegally harvested wood is included. In fiscal 2013, it was determined, based on shipping documents and questionnaire responses provided by each supplier, that no illegally harvested woodchips were procured from overseas suppliers.

### Confirming the legality of domestically produced woodchips

In 2006 guidelines for confirming the legality of woodchips were specified as stipulated in the Law on Promoting Green Purchasing. Set forth as methods for confirming legality were the submission of individual harvesting and other documents, and the acquisition of a trade association certification approving the system of procurement management.

Nippon Paper Lumber has acquired this trade association certification. By taking in shipments of domestically produced timber and woodchips through this company, Nippon Paper Industries is receiving supplies of legally confirmed materials.

### Enhancement of traceability

Overseas suppliers are surveyed and requested to attend hearings. Every effort is made to enhance traceability while confirming compliance with statutory requirements regarding forest management, the species of woodchips and existence or otherwise of forest certification. Through these means, the Nippon Paper Group strives to confirm woodchip legality and sustainability. For woodchips procured from Japanese suppliers, traceability has been secured in accordance with the Guideline for Verification of Legality and Sustainability of Wood and Wood Products issued by the Forest Agency.

### Concern for human rights, labor and the local community

Utilizing a process of surveys and hearings, Nippon Paper Industries works to confirm its suppliers' policies and systems toward human rights and labor. This process has allowed the company to confirm that no human rights or labor relations issues have arisen.

At the same time, a large number of suppliers is working closely with local communities through social contribution activities including donations to schools and welfare facilities.

**■ Acquiring Certification for All Company-Owned Forests Inside and Outside Japan**

**Acquired certification through sustainable management**

Forest certification programs entail third-party confirmation that forests are being managed in a sustainable manner. The Nippon Paper Group uses these programs as benchmarks for sustainable forest management.

**● Certification acquired in Japan**

Nippon Paper Industries has acquired forest certification from the Sustainable Green Ecosystem Council (SGEC) for all company-owned forests in Japan. SGEC evaluates the sustainable management of forests, including preservation of the wide-ranging functions of forests such as watershed protection and biodiversity conservation while taking into account the Japanese climate and conditions. The forests owned by Nippon Paper Industries have received SGEC certification acknowledging the company's efforts to engage in forest management that takes into consideration biodiversity and the natural environment of each region. Moving forward, the company will maintain this certification.

**● Certifications acquired outside Japan**

Nippon Paper Industries has completed its objective of obtaining certifications of all its forests overseas.

**\* FM and CoC Certification**

The forest certification system is composed of two components—the Forest Management (FM) component, which certifies that forests are responsibly managed, and the Chain-of-Custody (CoC) component, which certifies that products from certified forests have been properly processed and distributed. Under the FM certification system, a third party certifies that the management of forests is being undertaken in a sustainable manner based on various objective benchmarks including (1) compliance with regulatory requirements and system frameworks, (2) maintenance and conservation of forest ecosystems and biodiversity, (3) respect for native and local resident rights, and (4) maintenance and improvement of forest productivity. CoC certification is a system covering all operators engaged in the processing and distribution of timber materials. In addition to certifying that products (certified woodchips) are managed based on the forest certification standard in each process including processing and distribution, CoC certification confirms that a risk assessment of all non-certified woodchips has been undertaken. Products display a certification mark in the event that all operators have acquired CoC certification across all processes.

**■ Promoting Procurement of Wood Resources from Certified Forests**

**Aiming to procure all imported hardwood chips from only PEFC- or FSC-certified forests**

After achieving the objective of procuring all imported hardwood chips from plantations or certified forests in 2009, the Nippon Paper Group established the new objective of ensuring that all imported hardwood chips procured are certified under the Programme for the Endorsement of Forest Certification (PEFC) or Forest Stewardship Council (FSC®) schemes under its Green Action Plan 2015. As a result, the Group is now working to promote the procurement of imported hardwood chips from forests that have acquired FM or CoC\* certification, which confirms that a risk assessment has been undertaken.

A lot of the Group's suppliers have acquired CoC certification, and as of December 31, 2013, 100% of the total volume of imported hardwood chips received were comprised of materials with either the PEFC or FSC® certification.

**Status of forest certification acquisition for overseas afforestation project**

Overseas plantation project by operating company	Certification system name (License no.)	Date of acquisition
VTP (Australia)	AFS	May 2005
PTP (Australia)	AFS	June 2006
BTP (Australia)	AFS	April 2006
SEFE (Australia)	AFS	October 2006
Volterra (Chile)	FSC® (FSC-C120260), CERTFORCHILE	January 2014, December 2007
Forestco (South Africa)	FSC® (FSC-C022307)	April 2003
AMCEL (Brazil)	FSC® (FSC-C023383), CERFLOR	December 2008, September 2014 (expected)

**Overview of major forest certification programs**

Certification program name	Details and features
FSC®—Forest Stewardship Council® A global forest certification program	FSC® is a non-profit international member-based organization that certifies that forests are being managed in compliance with its 10 principles and standards. FSC® has adopted the FM and CoC certification system.
PEFC—Programme for the Endorsement of Forest Certification A program that promotes mutual recognition of the forest certification programs of individual countries	PEFC bases its sustainability benchmark on a broad consensus expressed in intergovernmental processes and guidelines. It provides a mutual recognition system that endorses compatibility and comparability of the responsible forest management systems of individual countries. Launched across countries in Europe, the program encompasses the forest certification programs of 37 countries around the world. In similar fashion to FSC®, PEFC has adopted the CoC certification system.  Examples of certifications mutually recognized by PEFC (for forests owned by Nippon Paper Industries Co., Ltd.) Australian Forestry Standard (AFS): Australia / CERTFORCHILE: Chile / CERFLOR: Brazil
SGEC—Sustainable Green Ecosystem Council A forest certification program established in Japan	SGEC certifies forest management combining an abundant natural environment with continuous lumber production. SGEC engages in an evaluation based on seven criteria and 36 benchmarks while taking into consideration Japan's natural environment as well as its social customs and culture. SGEC has also adopted the CoC certification system.

# Protecting and Nurturing Japan's Wood Resources

Maintaining a focus on forest management that takes into consideration the characteristics of each region in an effort to promote sound growth

## ■ Sustainable Management of Company-Owned Forests in Japan

**Practicing sustainable forest management at company-owned forests over an area extending to 90,000 hectares**

Nippon Paper Industries owns approximately 90,000 hectares of company forest in 400 locations in Japan. Accordingly, the company is the second largest owner of forests in the private sector.

For the Nippon Paper Group, forests are not only an important business resource—as a corporate group whose existence is closely tied to the health and conservation of forests, we recognize and work to manage the integrity of the multifaceted role forests play within society.

### ● Maintaining company-owned forests in Japan

Nippon Paper Industries allocates approximately ¥0.7 billion each year to the maintenance and management of company-owned forests in Japan, which entails weeding, pruning and thinning. As a company which has continued to benefit and grow through forests and forest products, we are committed to balanced, sustainable forest management that allows forests to fulfill their multifaceted functions—including ones that benefit ecosystem protection and watershed conservation—despite the fact that forests within Japan are not currently economically viable because of the stagnant price of domestic timber.

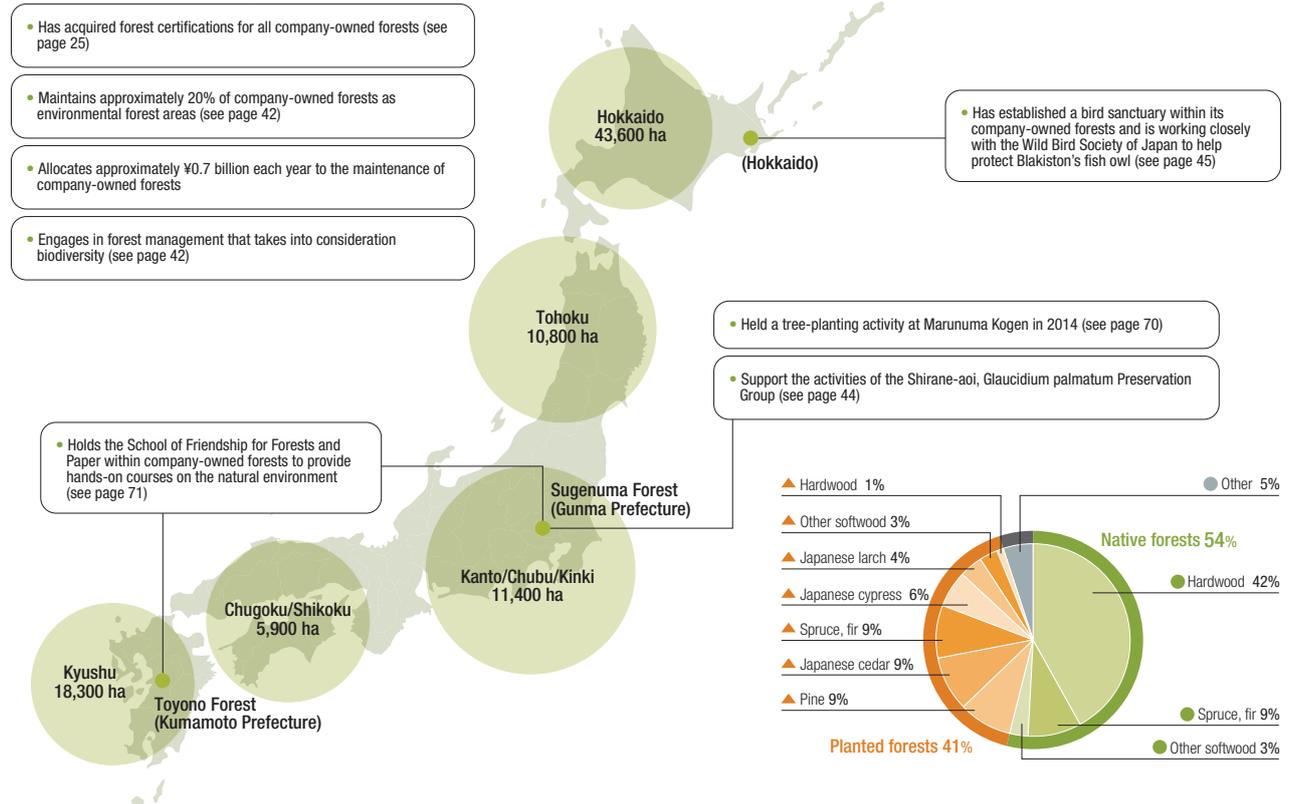
## ■ Invigorating Japan's Forest Industry

**Actively utilizing domestically produced timber while contributing to the prevention of forest deterioration**

In recent years, deterioration of artificially planted Japanese cypress and Japanese cedar forests throughout Japan has become a concern. The reason for this deterioration is low lumber prices that have squeezed forest industry profitability and made it impossible to perform thinning and other necessary maintenance. To invigorate the industry and prevent further forest deterioration, the Japanese government announced its Forest and Forestry Revitalization Plan in 2009. Under this plan the government has committed the nation's resources to promoting the use of domestically produced wood, and lifting the nation's wood self-sufficiency rate from 24%, as of 2008, to 50% by 2020.

The Nippon Paper Group is working to increase the percentage of domestically produced wood it uses to make paper. Having reached 30% in fiscal 2008, this figure rose by over 6 percentage points, to 36.5%, in fiscal 2013. Producing a greater volume of paper entailed the use of less domestically produced wood as a percent of raw materials used than in the prior year, but still resulted in a year-on-year absolute increase of 6% in our usage of this material in 2013. Moving forward, the Nippon Paper Group will continue to actively use domestically produced wood, and thereby contribute to the revitalization of Japan's forest industry.

### Distribution of company-owned forests in Japan and composition by species (Nippon Paper Industries Co., Ltd.)



### Domestic timber utilization rate<sup>1</sup> (Nippon Paper Group)



<sup>1</sup> The domestic (Japan) timber utilization rate includes sawmill residues.  
<sup>2</sup> Source: *Supply and Demand of Lumber* issued by the Forestry Agency of Japan  
<sup>3</sup> Source: *Yearbook of Paper and Pulp Statistics* issued by the Ministry of Economy, Trade and Industry of Japan

### Organizing private-sector forest owners in the Yatsushiro area

Increasing the competitiveness of Japan's forest industry requires that forest owners work together to have good road network and systematic thinning operations. The signing of a memorandum of understanding on the advancement of forest management in Kyushu by Nippon Paper Co. Ltd., the Kyushu Regional Forest Office; Oji Paper Co., Ltd.; Sumitomo Forestry Co., Ltd.; and others in September 2009 set in motion a process that would result in the March 2014 conclusion of a forest management and lumber production agreement for the Yatsushiro region, a groundbreaking wide-area model agreement by private-sector forest owners to manage forests collaboratively in Kyushu. Participants in the agreement include Kumamoto Prefecture, Yatsushiro City, the Yatsushiro Shinrin Forest Cooperative, and Nippon Paper Co. Ltd.

### Case Selling copier paper made with thinned wood from Kyushu

Nippon Paper Industries has begun to sell "Kininaru Kami" copier paper made with wood from forest thinning operations in Kyushu.

Since 2009, the "Kininaru Kami" product series has been promoted by the Kyushu Regional Forest Office, eight prefectural governments (seven in Kyushu, plus Okinawa), paper companies, paper distributors, and others participating on a committee for the advancement of a movement aimed at generating popular support for the invigoration of Japan's forest industry. This movement seeks to return a portion of the revenue from sales of products using wood from forest thinning operations to forest owners to promote forest management, invigorate the forest industry and mountain villages, and help stop global warming.

Nippon Paper Industries' "Kininaru Kami copy paper," which was introduced in July 2013, is made by the company's Yatsushiro Mill, in Kyushu, with wood from forest thinning operations in Kyushu. The product package carries the "Kininaru Kami" series name in



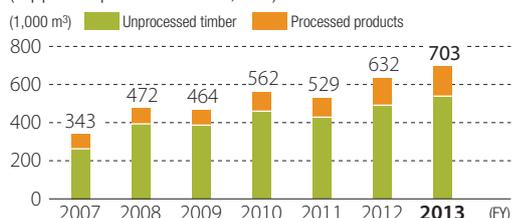
Packaging emphasizing that products were "made in Kyushu"

prominent characters, together with a map of Kyushu and a likeness of Kumamon, Kumamoto Prefecture's PR mascot, all to emphasize the product's "made in Kyushu" origins.

### Case Actively promoting the use of domestic timber

With its network for domestic timber collection in Japan, and its ability to handle a comprehensive lineup of products, Nippon Paper Lumber is actively developing its domestic timber business. In fiscal 2013, the company handled approximately 700,000 m<sup>3</sup> of domestically produced materials, and ranked second in its field in Japan. The company aims to lift this figure to 1,000,000 m<sup>3</sup>, and, to this end, is continuing to develop new applications while working to further boost exports.

#### Domestic timber sales results by product type (Nippon Paper Lumber Co., Ltd.)



### Case Creation of the "Japan wood mark" and participation in promotion activities

Based on the concept that greater use of domestically produced wood by Japan's people and industries will rejuvenate the country's forests, the Forestry Regeneration Committee of the Japan Project-Industry Council (JAPIC) created the Japan wood mark, and a committee dedicated to the promotion of its use, in August 2013.

Nippon Paper Industries contributed to the creation of the Japan wood mark and is one of the original participants on the Japan Wood Mark Committee. As it



Mark promoting the use of domestically produced wood

engages in activities that help to advance use of the Japan wood mark, Nippon Paper Industries intends to apply it as a sales promotion tool for wood from the forest it owns in Japan.

# Promoting Overseas Afforestation

Planting trees as a renewable resource, and coexisting with local communities

## Basic Stance

### Developing an afforestation business that contributes to the local community

Recognizing the importance of mutual growth and development the Nippon Paper Group strives to build positive ties with the local communities in and around its forests. We pay particular attention to the concerns of local residents while taking into consideration the cultures and traditions of each region as well as the natural environment and ecosystems. Considerable effort is also placed on promoting educational activities, and creating employment opportunities, within local economies.

## Tree Farm Initiative

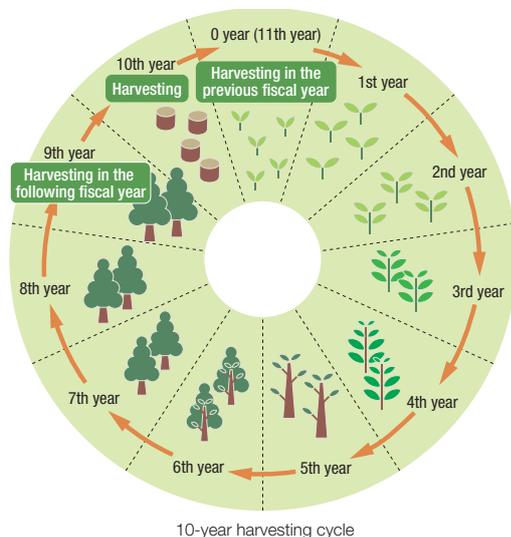
### Nurturing renewable wood resources

In similar fashion to the cultivation of crops in the field, the Tree Farm Initiative achieves sustainable raw materials procurement by growing as many trees as are harvested and used each year.

Under its Environmental Action Plan (Green Action Plan 2015) (see page 31), the Nippon Paper Group has identified the target of increasing overseas afforestation areas to 200,000 hectares.

### The afforestation cycle

Trees are systematically planted in accordance with annual plans and harvested for use after significant growth. After harvesting, steps are taken to regenerate forests through replanting as well as coppicing, (the growth of new trees from the shoots that sprout from stumps). In repeatedly implementing this cycle, we gain the benefit of access to a permanent source of forests. Moving forward, we are also cultivating hardwood chip resources through cycle-based forest management.



## Overview of Afforestation Areas

### Managing 116,000 hectares of forest land in four countries

The Nippon Paper Group manages 116,000 hectares of forest land in the four countries of Australia, South Africa, Chile and Brazil.

### Afforestation areas under management



### Considering the needs of local residents (see pages 69, 71)

#### Case Afforestation projects that help the local ecology

The Nippon Paper Group conducts afforestation projects on grasslands, former farms and pastures and on harvested plantation land. We select species, focusing mainly on Eucalyptus, according to individual climatic conditions and materials available for making paper. Eucalyptus trees are known for their quick growth. In order to maintain a balance between the planting of fast-growing, highly profitable trees and the biodiversity needs of each region, we implement appropriate measures and keep vegetation along rivers and water courses where the potential effects on the ecology are large. For example, over half of the property held by Brazil-based AMCEL is protected as a conservation area. In addition to soil erosion countermeasures and the monitoring of water quality, every effort is being made through joint surveys with universities and research institutes to protect the natural vegetation and wildlife.



Tree planting that preserves riparian forests. (Right) The blue area indicates riparian forests.

# Environmental Responsibility



## Materiality

- Mitigation of Climate Change
- Biodiversity Conservation
- Reducing Waste Generation and Final Disposal
- Initiatives to Prevent Environmental Pollution
- Promotion of Waste Paper Recycling

The Nippon Paper Group's social responsibility is to effectively use sustainable resources to contribute to the ongoing development of society.

With proper management, forests become sustainable resources, and forest ecosystems and biodiversity can be protected. The CO<sub>2</sub> sequestering function of forests and the use of wood resources contribute to the prevention of global warming. And the use, recycling, and regeneration of wood resources contributes to the prevention of resource depletion.

As a comprehensive biomass enterprise pursuing the development of new products and expansion of business activities, the Nippon Paper Group owns large-scale production sites, and procures raw materials and ships finished products in massive volumes. Coexistence with local communities and society at large, therefore, demands that we work to reduce our environmental impact at every stage of the value chain.

That is why our highest priorities include measures to address the problem of climate change, protection of biodiversity, controlling the generation and emission of waste, measures to prevent environmental pollution, and promotion of waste paper recycling.

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Material Balance

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# Policy and Management

We are putting in place a Group-wide environmental management system based on our Environmental Charter and engaging in environmentally friendly corporate activities.

## Basic Stance

**Endeavoring to reduce the environmental impact of our activities taking into consideration the unique characteristics of our business and wide-ranging social issues**

Through the effective use of wood, a renewable resource, the Nippon Paper Group delivers a wide spectrum of products to society. Considering the substantial amounts of energy and water used in its manufacturing processes, the Nippon Paper Group has made reducing the environmental impact of its business activities a key corporate social responsibility.

The Nippon Paper Group is committed to increasing the efficiency of equipment and operations at every stage of the value chain. At the same time, we are promoting effective measures to address wider environmental issues including global warming, resource depletion, and air and water pollution.

## Environmental Charter

**Promoting corporate activities that take into consideration the environment based on the philosophy and basic policies of our Environmental Charter**

The Nippon Paper Group has established its Environmental Charter to provide a framework for pursuing eco-friendly business activities. Based on the philosophy and basic policies of this charter, the Group strives to reduce the environmental impact of its activities. Looking ahead, we will pursue corporate activities that respond to the heightened environmental awareness of stakeholders.

## Environmental Action Plan (Green Action Plan)

**In identifying specific objectives and concrete actions, we are working to raise the effectiveness of our environmental endeavors**

The Nippon Paper Group has incorporated into its Environmental Action Plan actions and objectives with respect to each six basic policy in its Environmental Charter. The Group has incorporated the value chain, traceability, and other new perspectives into the Green Action Plan, which sets forth objectives and actions for fiscal 2011 to fiscal 2015.

Group companies have each established their own specific environmental action plans based on this. Bringing together each Group company's efforts is enhancing our ability to accomplish the Green Action Plan 2015.

### The essence of the Green Action Plan 2015

- **Promote anti-global warming action**  
Achieve substantive reductions by adopting "total quantity" indices
- **Protect and develop forest resources**  
Clearly state the importance of full traceability
- **Promote the use of recycled resources**  
Promote the use of recycled resources by adopting "recycling rates" as indices
- **Observe environment-related laws and reduce environmental load**  
Strengthen environmental management from the perspective of a preventive approach in conjunction with efforts to observe environment-related laws

### The Nippon Paper Group Environmental Charter

(Established on March 30, 2001, and revised on March 30, 2007)

#### Philosophy

The Nippon Paper Group is committed to helping preserve the global environment over the long term and contributing to the development of a recycling based society by carrying out its corporate activities in recognition of the importance of biodiversity\*.

#### Basic Policy

1. Act to counter global warming
2. Protect and develop forest resources
3. Increase use of recycled resources
4. Comply with environmental statutes and work to minimize our environmental impact
5. Develop environmentally friendly technologies and products
6. Engage in active environmental communication

\* Biodiversity typically falls into three different classes: genetic diversity, which refers to the genetic variability within a species; species diversity, which covers the variety of species within a community; and ecosystem diversity, which entails the organization of species in an area of distinctive plant and animal communities.

### The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015)

This plan establishes concrete Group-wide specific objectives and actions based on the Group's overarching environmental philosophy and basic policies.

### Environmental action plans of each Group company

Each Group company, including Nippon Paper Industries, establishes its own set of objectives and actions based on the Green Action Plan 2015.

## The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) fiscal 2013 status

	Green Action Plan 2015	Progress	Page
1. Anti-global warming action	Reduce CO <sub>2</sub> emissions from fossil energy by 25% versus fiscal 1990.	<ul style="list-style-type: none"> <li>Notwithstanding the impact of decreased production volumes in the Paper and Paperboard departments, reduced CO<sub>2</sub> emissions from fossil energy by 26.6% as well as the use of fossil energy by 36.5% versus fiscal 1990 through energy-saving initiatives and successful efforts to promote the conversion of fuel.</li> </ul>	38
	Reduce the use of fossil energy by 30% versus fiscal 1990.		
	Reduce logistics-generated CO <sub>2</sub> emissions.	<ul style="list-style-type: none"> <li>With persistent efforts, paper operations have continued to far surpass the domestic industry average with a 91% adoption rate for highly efficient modal shift transport.</li> <li>Initiative by Nippon Paper Industries, Nanko Unyu, and JR Freight to transport waste paper by rail succeeded in reducing CO<sub>2</sub> emissions by approximately 1,750 tonnes per year (awarded certification as a modal shift project by Japan's Ministry of Land, Infrastructure, Transport and Tourism).</li> </ul>	40
2. Protection and development of forest resources	Facilitate the Tree Farm Initiative, an overseas afforestation project for procuring sustainable resources, with the aim of increasing overseas afforested area up to 200,000 hectares. <sup>1</sup>	<ul style="list-style-type: none"> <li>As of the end of 2013, the afforested area in overseas afforestation operation came to 116,000 ha with the sale of shares in WAPRES. Shares were sold in connection with AMCEL becoming a wholly owned subsidiary.</li> <li>Going forward, plans to take full advantage of AMCEL's 130,000 ha (70,000 ha remaining) of afforestable areas will be drawn up for purposes including afforestation for the energy business.</li> </ul>	28
	Maintain forest certification in all proprietary forests, both domestically and internationally.	<ul style="list-style-type: none"> <li>Currently working to maintain SGECC, FSC<sup>®</sup>, and PEFC certification at all company-owned forests in Japan and overseas.</li> </ul>	25
	Ensure that all imported hardwood chips are PEFC- or FSC <sup>®</sup> -certified. <sup>3</sup>	<ul style="list-style-type: none"> <li>All hardwood chips imported in fiscal 2013 were PEFC- or FSC<sup>®</sup>-certified.</li> </ul>	25
	Enhance traceability and facilitate the procurement of sustainable forest resources.	<ul style="list-style-type: none"> <li>Cleared the requirements of PEFC rules in their entirety and FSC<sup>®</sup> rules to 75% with respect to the assessment of imported wood risk as of December 31, 2013.</li> <li>FSC Japan national risk assessment (with cooperation by Nippon Paper Industries) for FSC-controlled wood was approved by FSC headquarters in August 2014.</li> </ul>	—
3. Recycling of resources	Increase the ratio of recycled paper to paper to at least 40%. Increase the ratio of recycled paper to paperboard to at least 88%.	<ul style="list-style-type: none"> <li>Achieved ratios of recycled paper to paper and recycled paper to paperboard of 39.1% and 89.5%, respectively, through proactive efforts to utilize recycled paper.</li> </ul>	50
	Increase the waste recycling rate to at least 97%.	<ul style="list-style-type: none"> <li>As a result of progress in the effective use of granulated combustion ash and other waste, achieved a waste recycling rate of 95.6% (vs. total waste generated) and an on-site recycling rate 32.2% for waste generated at mills.</li> </ul>	46
	Recycle at least 40% of waste generated within mills.		
	Reduce water use in the manufacturing process.	<ul style="list-style-type: none"> <li>Taking steps to conserve water consumption by assessing material balance of water.</li> </ul>	47
4. Observance of environment-related laws and reduction of environmental load	Use the environmental management system to strengthen environmental management.	<ul style="list-style-type: none"> <li>Strengthening of the environmental management system, which is led by the Management Execution Committee, is underway and adoption of environmental management systems at individual works is being promoted. As of March 31, 2014, 52 business locations at 19 consolidated subsidiaries, and 4 business locations at 4 non-consolidated subsidiaries, had obtained ISO 14001 certification. Eco-Action 21 certification had been obtained by 1 business location at 1 non-consolidated subsidiary.</li> </ul>	32
	Properly control and reduce the use of chemical substances.	<ul style="list-style-type: none"> <li>Established the Nippon Paper Group Chemical Substance Management Guidelines and used them as a basis for ascertaining the types and volumes of chemical substances handled, and endeavoring to promote proper chemical substance management.</li> </ul>	48, 49
	Facilitate the procurement of raw materials and equipment with a smaller environmental burden throughout the supply chain.	<ul style="list-style-type: none"> <li>Under energy management rules, energy efficiency is used as one selection benchmark for purchasing and updating equipment.</li> </ul>	—
5. Development of eco-friendly technologies and products	Enhance the more sophisticated use of wood materials.	<ul style="list-style-type: none"> <li>A test facility for cellulose nanofiber (CNF) production has been installed at Nippon Paper Industries' Iwakuni Mill. Mass-production technologies are being examined and product samples are being provided to support application development.</li> <li>Participated in a NEDO project for the development of a manufacturing process for non-edible plant-based chemical products, advancing the development of a process for manufacturing various types of chemical product raw materials from wood biomass through an industry-government-academia collaboration.</li> </ul>	11
	Develop equipment technology for facilitating a departure from reliance on fossil energy.	<ul style="list-style-type: none"> <li>Continuing to develop biomass processed fuel for pulverized coal boilers. Have begun evaluation of high-temperature, high-speed torrefaction and steam explosion for reducing facility investment and running costs.</li> <li>Regarding biomass power generation at Yatsushiro Mill, established a committee for supplying raw materials for the startup of an FIT project as the first in Japan to use 100% unused material.</li> </ul>	—
	Reduce the environmental load through eco-friendly products and services.	<ul style="list-style-type: none"> <li>Considering use of waste-paper processing technology to commercialize recycling of used paper diapers. Participating as an observer on a committee (created in July 2013) considering possibilities for a paper diaper recycling system for the city of Fukuoka. Also providing technical cooperation for constructing an optimal system for material recycling.</li> <li>Introduced the Aluminum-Free Fuji Pak, a long-term storage aseptic container that can be collected through the same channels used for traditional milk and other gable-top paper containers.</li> </ul>	55, 56
6. Proactive environmental communication	Disclose environment-related information to stakeholders whenever appropriate with the use of CSR reports, the website etc.	<ul style="list-style-type: none"> <li>Sustainability reports are being made available in both printed and online editions. Also, <i>ShikiOriori</i>, an environmental and social communication magazine is being published to provide reader-friendly information on environmental and social issues.</li> </ul>	20
	Proactively facilitate environmental communication on a regional basis through, for example, dialogue with local people and governments.	<ul style="list-style-type: none"> <li>Placed particular emphasis on risk communication as a part of efforts to share risk information with local communities and to foster relationships of mutual trust.</li> </ul>	34
	Proactively participate in and support environment conservation activities.	<ul style="list-style-type: none"> <li>Actively participated in environmental endeavors including clean-up and beautification initiatives organized by local communities, while promoting various activities including mill tours and internships.</li> </ul>	70, 71
7. Biodiversity commitments	Remain aware of the impact of business activities on biodiversity, and facilitate companywide biodiversity commitments.	<ul style="list-style-type: none"> <li>Positioning forest certification systems as one of several biodiversity conservation benchmarks in an effort to promote sustainable forest management in line with core business activities.</li> <li>Concluded an agreement with Coca-Cola (Japan) Co., Ltd. to conserve and protect forest and water resources over the medium-to-long term as an initiative that makes the most of proprietary resources and technologies.</li> </ul>	42–45

<sup>1</sup> No deadline has been set at this point.

<sup>2</sup> FSC<sup>®</sup> Logo License No. FSC-C001751, FSC-C005984, FSC-C095114

<sup>3</sup> Aside from FM certification, CW certification is also included.



Environment performance data

<http://www.nipponpapergroup.com/english/csr/>

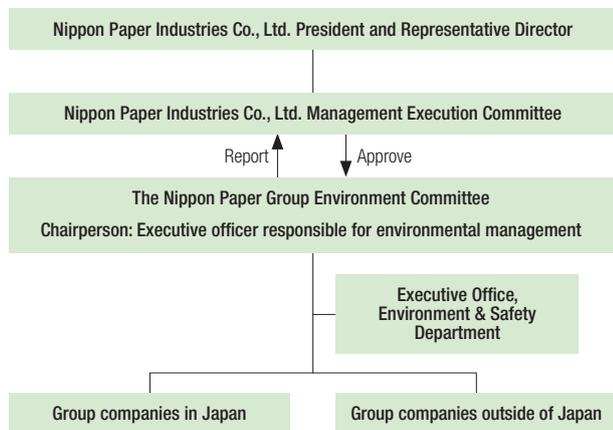
# Policy and Management

## Environmental Management Promotion Structure

### Putting in place a Group-wide environmental management structure in an effort to promote environment management

The Management Execution Committee bears management decision-making responsibility for the Nippon Paper Group's environmental strategy and oversees environmental activities for the entire Group. Chaired by the executive officer responsible for environmental management, the Nippon Paper Group Environmental Committee draws up the Environmental Action Plan. This Action Plan serves as the basis for practicing the philosophy and basic policies of the Environmental Charter (see page 30), which outlines the environmental management principles of Group companies. In addition to monitoring the status of progress under the Plan, the Environmental Committee reports to the Management Execution Committee. Drawing on these reports, the Management Execution Committee in turn deliberates on and determines new initiatives as a part of efforts to oversee the environmental activities of the entire Group and to promote ongoing improvement.

### The Nippon Paper Group's environmental management promotion structure (as of March 31, 2014)



## Introducing environmental management systems

As one measure aimed at promoting environmental management, the Nippon Paper Group is introducing various environmental management systems including ISO 14001, the international standard for environmental management, and Eco-Action 21. The Nippon Paper Group's consolidated subsidiaries and principal production bases have a 98% ISO 14001 certification acquisition rate.



ISO 14001 Certificate

## Acquisition of ISO 14001 certification (as of March 31, 2014)

Company Name	Mills / Facilities/ Offices
Nippon Paper Industries Co., Ltd.	Kushiro Mill, Hokkaido Mill, Akita Mill, Ishinomaki Mill, Iwanuma Mill, Nakoso Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Fuji Mill, Otake Mill, Iwakuni Mill, Yatsushiro Mill, R&D Dept.
(Paper-Pak Division)*	Paper-Pak Division (Ochanomizu and Oji regions)
(Chemical Division)	Gotsu Mill, Iwakuni Mill, Higashimatsuyama Mill, Yufutsu Mill
Nippon Paper Crecia Co., Ltd.	Tokyo Mill, Kaisei Mill, Kyoto Mill, Koyo Mill
Nippon Paper Papylia Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
Kitakami Paper Co., Ltd.	Headquarters/Ichinoseki Mill
NP Trading Co., Ltd.	Headquarters/Sapporo Branch Office/Chubu Branch Office/Kansai Branch Office/Chugoku Branch Office/Kyushu Branch Office/Shizuoka Sales Office/Shikoku Sales Office
Nippon Seitai Corporation	Headquarters, Hokkaido Office, Niigata Office, Maebashi Mill, Saitama Mill, Kansai Office, Kyusyu Office
Daishowa Uniboard Co., Ltd.	Headquarters, Miyagi Mill
SHIKOKU COCA-COLA BOTTLING CO., LTD.	Headquarters, Komatsu Plant
SHIKOKUCANTEENCO., LTD.	Headquarters
DYNAFLOW CO., LTD.	Headquarters
N&E Co., Ltd.	
Nippon Paper Development Co., Ltd.	Headquarters, Landscape Department, Tokyo Department
Sakurai Co., Ltd.	Headquarters
Nippon Paper Ishinomaki Technology Co., Ltd.	Headquarters
Nippon Paper Industries USA Co., Ltd.	Port Angeles Mill
Australian Paper	Maryvale Mill, Shoalhaven Mill
South East Fiber Exports	Eden
JTOy	Kauttua Mill

\* The production subsidiary of Nippon Paper Industries' Paper-Pak Division, SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD., MIKI PAPER-PAK CO., LTD., and ISHIOKA KAKO CO., LTD. have also acquired ISO 14001 certification.

## The status of Eco-Action 21 acquisition (as of March 31, 2014)

Company Name	Mill / Works
Akita Jujo Chemicals Co., Ltd.	Head Office Plant



ISO 14001 renewal inspection

## Strengthening Environmental Compliance

### Two-pronged approach for engaging in activities designed to bolster environmental compliance

In order to better manage and reduce the environmental impact of its business activities, the Nippon Paper Group is strengthening environmental compliance by placing equal emphasis on preventing problems and on establishing a framework that ensures all problems come to light.

#### Two-pronged approach to bolstering environmental compliance

##### Building systems to prevent problems

- Building a workplace that places the utmost importance on the environment (environmental compliance training)
- Reinforcing systems to identify laws and regulations
- Implementing measures from both the facility and technology perspectives



##### Establishing a framework that ensures all problems come to light

- Bolstering environmental audits
- Strengthening the environmental management structure
- Engaging in environmental communication and active information disclosure

### Strengthening the framework for reliably identifying laws to be observed

To accurately respond to wide-ranging and relatively frequent changes in environmental legislation, Nippon Paper Industries has signed advisory agreements with knowledgeable legal experts.

A legal search system, as well as advice on new and complex laws, has bolstered the framework for reliably identifying laws to be observed and their content.

### Introducing equipment and facilities to prevent environmental accidents

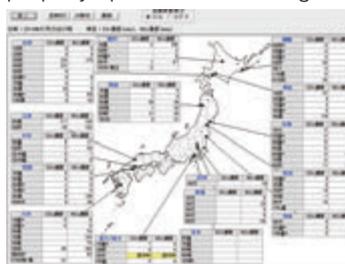
While moving to strengthen its legal compliance systems, the Nippon Paper Group is also working to introduce equipment and facilities to prevent environmental accidents.

Nippon Paper Industries identifies risks of environmental accidents in terms of both probability and potential impact, and introduces the equipment and facilities needed for prevention. Acting on the top priority of preventing chemical spills, the company took steps like installing liquid containment walls in fiscal 2013.

### Strengthening environmental management systems

At the Nippon Paper Group, efforts are being made to strengthen the environmental management systems overseen by the headquarters of individual Group companies.

Nippon Paper Industries, for example, has adopted a system for centrally managing emissions from the boilers of individual mills and other business locations. Efforts such as this illustrate how the company's headquarters and production facilities work together to ensure facilities are properly operated and managed.



Environmental information management system

### Environmental audits that place particular emphasis on legal compliance

Based on the environmental management guidelines on pollution prevention issued by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry in March 2007, Nippon Paper Industries conducts environmental audits focusing on legal compliance.

The conduct of these audits, which follow an environmental compliance checklist, begins within the mills. On completion, the person responsible for the company's head office Environment & Safety Department conducts an additional environmental audit. This system of complementary checks and balances helps enhance efforts aimed at ensuring legal compliance. Moreover, the Nippon Paper Group has put in place a system of mutual audits. Under this system, the persons responsible for the environment at other Group companies participate in the audits of each company.



Conducting a document audit



Conducting a field inspection

### Status with regard to legal compliance

We were not subject to any form of adverse disposition from regulatory authorities (suspension of licenses, orders to suspend operation or the use of facilities, or fines) with respect to compliance with environmental regulations in fiscal 2013.

## Policy and Management

### Environmental Communication

Actively promoting environmental communication and reflecting feedback into our environmental activities

#### Risk communication

The Nippon Paper Group places particular emphasis on sharing risk information in an effort to nurture strong ties of trust with local communities. To this end, the Group engages in risk communication with local residents at each of its mills. We recognize that in creating opportunities to exchange information about the risks associated with chemical substances and disasters, we are better placed to raise mutual awareness toward risk measures and to foster a greater sense of cooperation. When installing large-scale equipment, the Nippon Paper Group also conducts explanatory meetings to provide a better understanding of any impact on the environment.



Risk communication meeting (Nippon Paper Industries' R&D Division)

We established the Nippon Paper Group Risk Communication Guidelines in fiscal 2011, and, going beyond simply disclosing information, hold dialogues with stakeholders in annual communications on risk.

#### Responses to opinions and complaints

In addition to receiving opinions and inquiries via its website, the Nippon Paper Group has established a complaint and inquiry contact at each of its mills. We have also adopted environmental monitoring systems that are effectively driven by local residents to ensure that their comments are appropriately conveyed.

In fiscal 2013, the Nippon Paper Group handled 29 environment-related complaints in Japan. With each complaint, the relevant mill took steps to determine the cause, and took swift countermeasures. In those instances where a permanent solution required an extended amount of time, all appropriate provisional measures were taken as quickly as possible. Later, consideration was given to each complaint to ensure a permanent solution. With each complaint, the Group takes steps to explain the details of remedial action to be taken and to obtain the necessary acknowledgement.

#### Environment-related complaints (fiscal 2013)

Complaints	No. of complaints	Complaints	No. of complaints
Noise	15	Vibration	0
Dust and mist dispersal	4	Smoke	3
Odor	5	Other	2
Total 29			

### Environmental Education and Training

Supporting employees increase their knowledge and skills

The Nippon Paper Group provides environmental education in various forms. This education is aligned to the career status of each employee from basic knowledge to specialist education including wastewater treatment plant operation. In addition, the Group encourages employees to attend externally organized training seminars to further their qualifications and skills.

#### Environmental e-learning

The Nippon Paper Group has introduced an online educational program to allow employees to learn about the environment at a time, place, and pace of their own convenience. June is Environment Month and in June 2014



"Waste and Recycling" environmental e-learning in fiscal 2014

we offered an online program, under the theme of "Waste and Recycling," which many employees participated in.

#### The Nippon Paper Group Eco Photo Award

The Nippon Paper Group has held the Eco Photo Awards in June as a part of its Environment Month activities. Through the medium of photos, this initiative is another opportunity for employees and their families to focus on the environment.



The 7th Eco Photo Award grand prize "Green Carpet – from paper source"

## Environmental Accounting

### Environmental conservation expenses amounted to around ¥32.2 billion

To advance environmental protection initiatives more efficiently and effectively, the Nippon Paper Group practices

environmental accounting to track its environmental protection investments and expenses and quantify their impacts.

#### Environmental accounting\*

##### Environmental conservation costs

(Millions of yen)

Categories	Principal Activities	Investment	Cost
(1) Business area costs			
1. Pollution prevention costs	Maintaining, managing and improving air and water pollution prevention facilities, etc.	666	14,564
2. Global environmental conservation costs	Preventing global warming as well as maintaining and managing company-owned forests, etc.	3,551	947
3. Resources circulation costs	Effectively utilizing recycled paper as well as treating, reducing and recycling industrial waste, etc.	330	8,089
(2) Upstream / downstream costs	Recovering pallets, etc.	–	2,208
(3) Administration costs	ISO 14001 inspection, operation and management; environmental information disclosure; employee environmental education; and workplace cleaning initiatives, etc.	–	360
(4) R&D costs	R&D relating to environmentally friendly products as well as the reduction of environmental load imposed by paper manufacturing processes, etc.	–	927
(5) Social activity costs	Local community natural conservation, tree planting, cleaning and landscaping activities, as well as donations and support for environmental organizations, etc.	–	74
(6) Environmental remediation costs	Levy for pollution-related health damage compensation system (SOx), etc.	–	512
<b>Subtotal</b>		<b>4,547</b>	<b>27,681</b>
<b>Total</b>		<b>32,228</b>	

#### Results of environmental impact in 2013

Categories	Environmental Impact Indicators		Results	YoY Change
Effects related to resources introduced to business activities	Afforestation projects overseas	Overseas afforestation areas	116,000 hectares	–
	Energy-saving measures	Fuel use (Heavy oil equivalent)	–	Down 31,648 kl
Effects related to environmental impact and waste from business activities	Greenhouse gas emission control	CO <sub>2</sub> emissions from fossil energy	6,690,000 tonnes	Up 60,000 tonnes
		NO <sub>x</sub> emissions (NO equivalent)	7,525 tonnes	Down 424 tonnes
	Emissions of hazardous air pollutants	SO <sub>x</sub> emissions (SO <sub>2</sub> equivalent)	2,617 tonnes	Down 887 tonnes
		Soot and dust emissions	1,226 tonnes	Up 182 tonnes
	Emissions of water contaminants	Effluent	868,000,000 tonnes	Down 37,000,000 tonnes
		COD/BOD emissions	55,847 tonnes	Up 1,891 tonnes
		SS emissions	21,760 tonnes	Up 505 tonnes
Final waste disposal		29,600 tonnes	Down 19,000 tonnes	
Effects related to goods and services produced from business activities	Product recycling	Recycled paper utilization rate (paper)	39.1%	Down 2.2%
		Recycled paper utilization rate (paperboard)	89.5%	Up 0.1%
	Shipping material recycling	Pallet recovery rate	45.0%	Down 0.4%

#### Economic benefits of environmental conservation

(Millions of yen)

Effect	Amount
Income from company-owned forests in Japan	638
Reduced expenses from energy saved	2,164
Reduced disposal expenses through the effective use of waste	5,754
Gain on sales from the recycled waste	429
Reduced expenses through the recycling of shipping materials	71
<b>Total</b>	<b>9,056</b>

\* Accounting standards are based on Environmental Accounting Guidelines 2005.

# Material Balance

Reducing the environmental impact of our activities, mainly among the manufacturing processes of our mainstay pulp and paper business

## Material Balance

### Identifying and reducing the environmental impact of our business activities

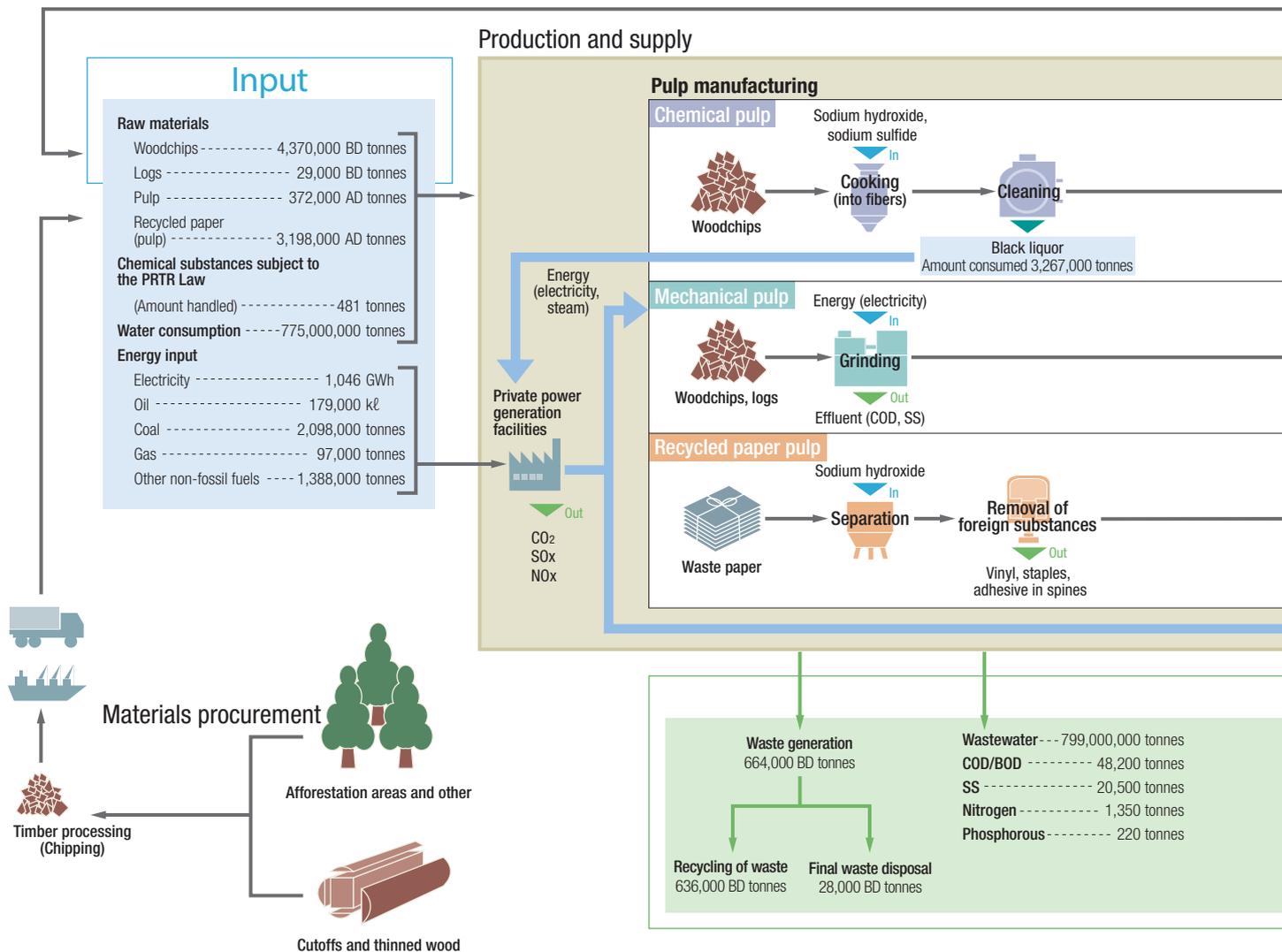
The Nippon Paper Group engages in a broad range of paper-related and other business activities driven primarily by the Pulp and Paper Division, which accounts for 78% of total net sales. Constituting most of the Group's material balance in Japan, this division is responsible for approximately 90% of the Group's water consumption and 95% of its CO<sub>2</sub> emissions.

Woodchips and recycled paper make up the bulk of raw materials used to make paper. After converting these raw materials into pulp, the pulp is diluted with water to produce pulp slurry and then formed as wet thin sheets. The water

is then removed by drying to make paper. In the pulp and papermaking processes, steam is used as a heat source and electricity as a power source. Pulp and paper mills are equipped with boilers that combust fuel to generate steam, and generators that create electricity with turbines driven by steam.

Unfortunate byproducts of the pulp and paper manufacturing process are effluents containing water contaminants as well as gases containing air pollutants and CO<sub>2</sub>. Moreover, the fuels combusted by boilers produce ash waste. With this in mind, the Nippon Paper Group strives to reduce the environmental impact of these pollutants.

Material balance in the Pulp and Paper Business in Japan (principal materials)

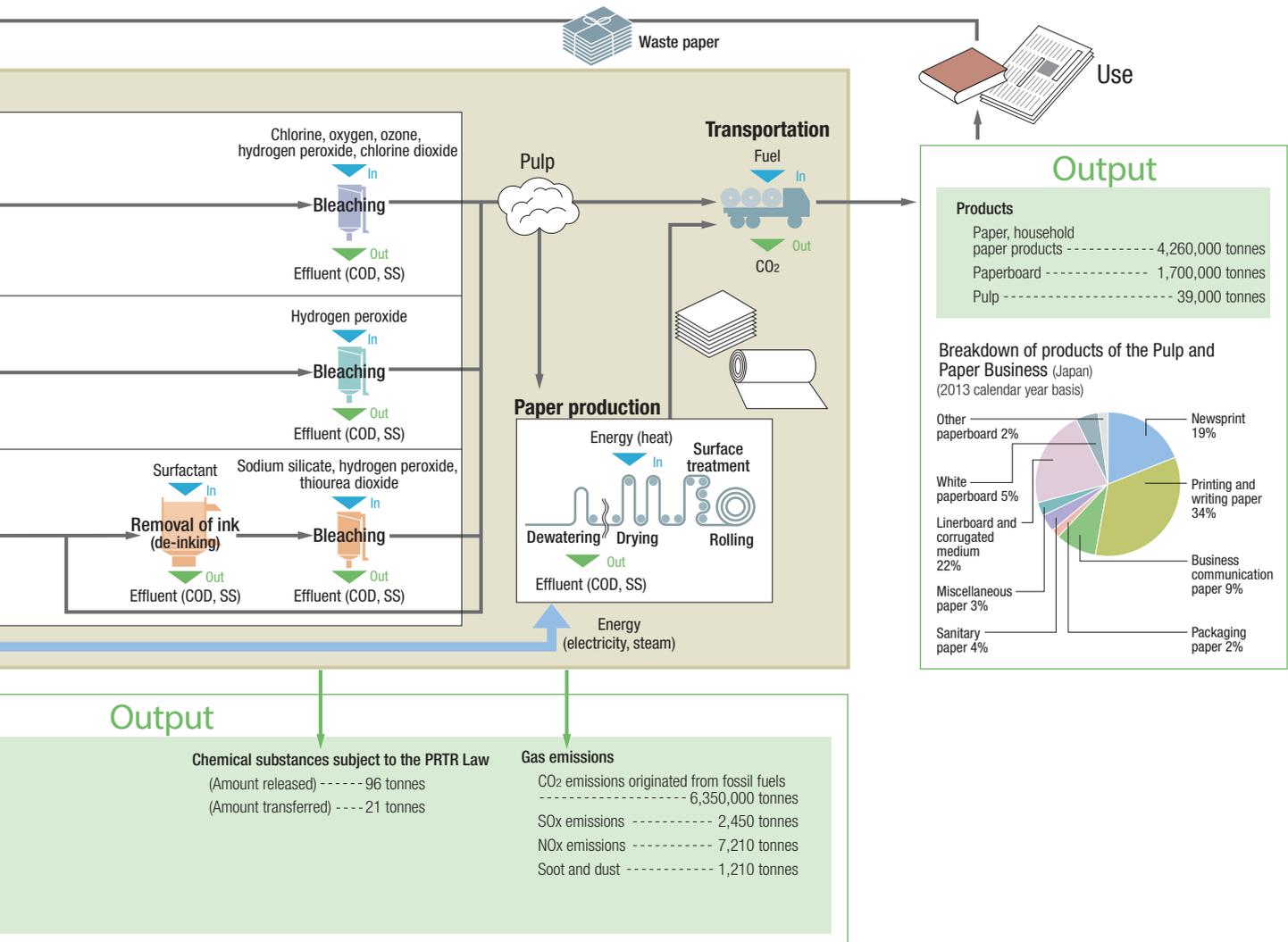


**Balance of materials for all business (principal materials)<sup>1</sup>**

Input	
<b>Fossil energy input</b>	
Electricity	2,220 GWh
Oil	185,000 kℓ
Coal	2,550,000 tonnes
Gas	239,000 tonnes
<b>Non-fossil energy input</b>	
Black liquor	3,987,000 tonnes
Other non-fossil fuels <sup>2</sup>	1,622,000 tonnes
<b>Chemical substances subject to the PRTR Law</b>	
(Amount handled)	11,824 tonnes
<b>Water consumption</b>	
River water	680,000,000 tonnes
Industrial water	175,000,000 tonnes
Well water	27,000,000 tonnes
Public water supply	1,000,000 tonnes
<b>Raw materials</b>	
Woodchips	4,903,000 BD tonnes
Logs	746,000 BD tonnes
Pulp	395,000 AD tonnes
Recycled paper (pulp)	3,306,000 AD tonnes
Base paper	122,000 BD tonnes

Output	
<b>CO<sub>2</sub> emissions from fossil energy</b>	7,290,000 tonnes
<b>SO<sub>x</sub> emissions</b>	3,340 tonnes
<b>NO<sub>x</sub> emissions</b>	9,030 tonnes
<b>Soot and dust</b>	1,520 tonnes
<b>Chemical substances subject to the PRTR Law</b>	
(Amount released)	294 tonnes
(Amount transferred)	159 tonnes
<b>Wastewater</b>	907,000,000 tonnes
Public water	899,000,000 tonnes
Sewerage	8,000,000 tonnes
<b>COD/BOD</b>	56,000 tonnes
<b>SS</b>	22,000 tonnes
<b>Nitrogen</b>	1,490 tonnes
<b>Phosphorous</b>	260 tonnes
<b>Waste generation</b>	769,000 BD tonnes
<b>Final waste disposal</b>	79,000 BD tonnes
<b>Recycling of waste</b>	690,000 BD tonnes
<b>Products manufactured</b>	
Paper, household paper	4,410,000 tonnes
Paperboard	1,700,000 tonnes
Pulp	136,000 tonnes
Paper container	107,000 tonnes
Chemical products	108,000 tonnes
Building materials	82,000 tonnes
Beverages	132,000 tonnes

<sup>1</sup> Australian Paper was added to the data collection scope in fiscal 2013.  
<sup>2</sup> Biomass fuels, except for black liquor, and waste fuels



# Mitigation of Climate Change

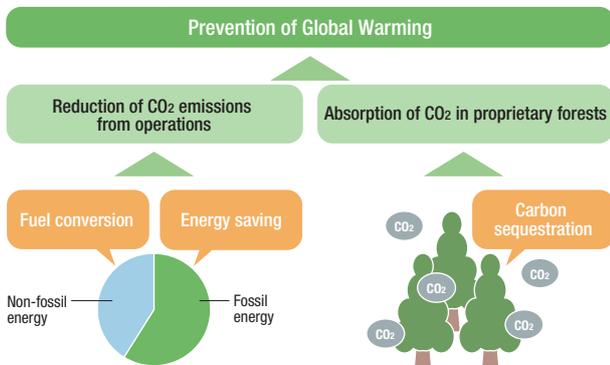
Reducing CO<sub>2</sub> emissions at every stage of our business activities

## Basic Stance

### Working to prevent global warming through three core initiatives

As a part of our efforts to prevent global warming across every stage of our business activities, we are (1) converting to non-fossil energy by employing boilers that use biomass and waste fuels (see page 39), (2) conserving energy in each of the production and transportation processes (see page 40), and (3) managing proprietary forests properly to ensure CO<sub>2</sub> absorption/sequestration (see page 41).

### Global warming initiatives



## Environmental Action Plan: The Green Action Plan

### Preventing global warming is the central objective of the Green Action Plan

#### Green Action Plan objective

In accordance with the first basic policy of its Environmental Charter, the Nippon Paper Group formulated an environmental action plan, the Green Action Plan (see page 31), as a part of its efforts to prevent global warming.

#### The objectives of the Green Action Plan 2015 aimed at preventing global warming

- Reduce CO<sub>2</sub> emissions from fossil energy consumption by 25% compared to fiscal 1990 levels
- Reduce the use of fossil energy by 30% compared to fiscal 1990 levels
- Reduce logistics-generated CO<sub>2</sub> emissions

## Progress under the Green Action Plan 2015

### Identifying goals through to fiscal 2015 and working to reduce CO<sub>2</sub> emissions

With the impacts of worsening global economic conditions since 2008 and the Great East Japan Earthquake in 2011, production volumes in the Nippon Paper Group's core paper and pulp businesses had been on downward trends.

In fiscal 2013, however, production volumes improved with post-quake recovery and emissions of CO<sub>2</sub> from fossil fuels increased compared to the prior fiscal year. Performance in terms of CO<sub>2</sub> emissions and fossil fuel usage, though, was still better than the levels recorded for fiscal 1990, with the former down about 27% and the latter down about 37%. Moreover, in both cases the goals set forth in the Green Action Plan 2015 were exceeded (see Graph 1, 2).

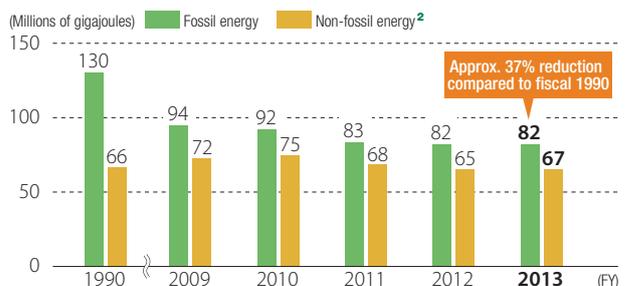
In the pulp and paper industry, most of the energy needed for production is produced with private (in-house) generating facilities, and steam and other forms of waste heat from power generation are employed in cogeneration systems that boost overall energy efficiency.

The Nippon Paper Group engages in these practices, as well, and is committed to reducing its use of fossil energy and preventing global warming by actively adopting technologies and facilities that will help it to use fossil energy more efficiently.

Graph 1. CO<sub>2</sub> emissions from fossil energy<sup>1</sup>



Graph 2. Energy input<sup>1</sup>



<sup>1</sup> For consolidated and non-consolidated subsidiaries subject to the Act on Rational Use of Energy

<sup>2</sup> Non-fossil fuel energy includes energy from biomass and waste.

**Fuel Conversion Led by the Adoption of Biomass Boilers**  
**Actively using biomass and waste fuels to reduce fossil energy usage**

The Nippon Paper Group is working to reduce its use of fossil fuels as one initiative for preventing global warming. In fiscal 2004, the Group began installing two types of boilers—high-efficiency boilers and boilers capable of burning construction waste and other biomass fuels; used tires, RPF\*; and and other waste fuels. By fiscal 2009, 10 of these boilers were in operation in Japan.

As a result of energy saving activities, and the fuel conversion accomplished through the introduction of these boilers, the Nippon Paper Group lowered fossil fuels as a percent of its total energy usage in Japan from 66% in fiscal 1990 to 55% in fiscal 2013 (See Graph 3).

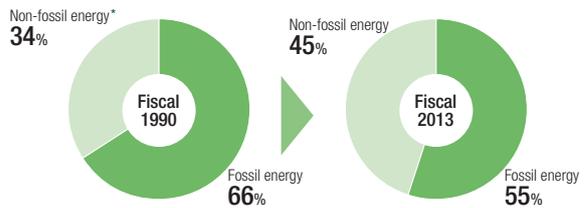
\* RPF (Refuse paper and plastic fuel): Fuel derived from paper that is unusable as recycled paper and waste plastic.

**Examples of biomass and waste fuels**



Construction waste and other materials RPF Used tires

**Graph 3. Change in fossil energy usage ratio (calories)**



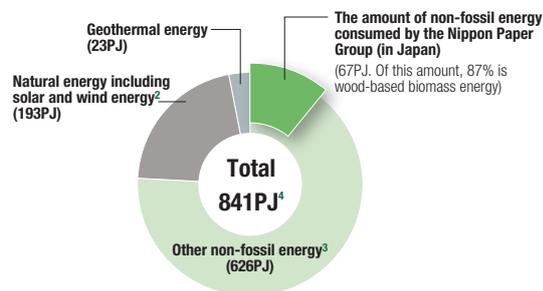
\* Non-fossil energy: Includes biomass and waste energy

**One of the largest corporate users of biomass energy in Japan**

The Nippon Paper Group is an active user of such non-fossil energy as wood-based biomass and waste fuels. The ratio of non-fossil energy to total energy consumed by the Group is 45%.

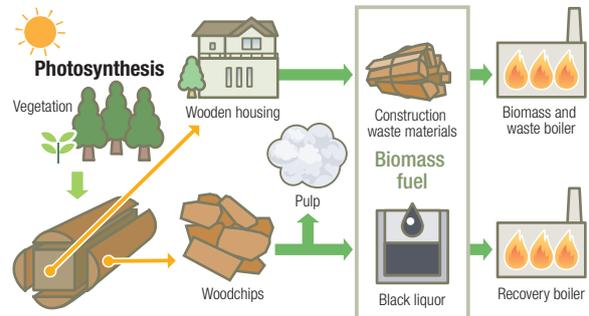
In addition, the amount consumed accounts for up to 8% of non-fossil energy used in Japan. In specific terms, wood-based biomass fuels, including black liquor and construction waste materials, make up 87% of this total. As such, the Nippon Paper Group is one of the largest corporate users of biomass energy in Japan.

**The quantity of non-fossil energy (excluding nuclear and water power) supplied in Japan<sup>1</sup> (Fiscal 2012)**



1 In-house data prepared using energy supply information published by the Natural Resources and Energy Agency.  
 2 Excluding private power generating facilities with a capacity of less than 1,000 kilowatts. In-house biomass power generation capacity was added beginning with fiscal 2010.  
 3 Other non-fossil energy is equivalent to the unused portion of energy based on the Resources and Energy Agency data identified in note 1, including waste power generation, direct-use black liquor, and waste energy recovery.  
 4 Unit: PJ (Petajoule: 10 to the 15th power Joules)

**Biomass energy utilization**



**Black liquor**

Black liquor, a byproduct of the pulp manufacturing process, is a wood-based biomass fuel that is unique to the paper manufacturing. Black liquor is used as a fuel in recovery boilers. Each year, the Nippon Paper Group's use of black liquor at 11 of its mills and offices is equivalent to 1.13 million kiloliters of crude oil.



**Construction and other waste material**

Behind black liquor, construction and other waste materials are the second most used wood-based biomass fuel. Each year, the Nippon Paper Group utilizes construction waste and other wood-based biomass fuels equivalent to 290,000 kiloliters of crude oil.

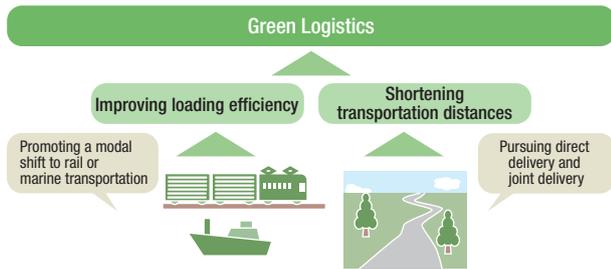
# Mitigation of Climate Change

## Advancing Energy Efficiency in Logistics

### Working to promote green logistics

The Nippon Paper Group focuses mainly on the two core initiatives of improving its loading efficiency and shortening transportation distances to reduce CO<sub>2</sub> emissions.

#### Logistics-related initiatives



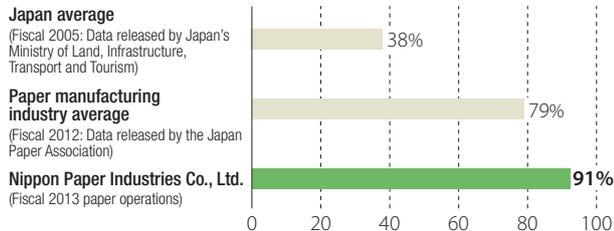
### Promoting a modal shift in transportation to secure high loading efficiency

Nippon Paper Industries achieved a modal shift rate\* of 91% in its paper operations in fiscal 2013. This far surpassed the domestic and industry averages.

**\* Modal shift rate:**

The percentage of rail or marine (including coastal shipping and ferries) transport in general cargo transported over 500 kilometers.

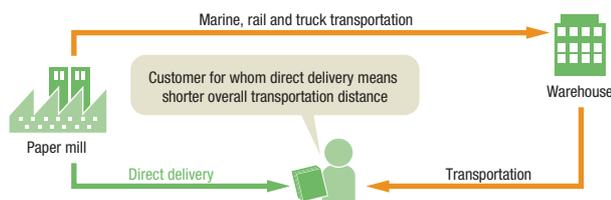
#### Comparison of modal shift rates



### Working with logistics service providers to shorten transportation distances

The Nippon Paper Group is working with logistics service providers to bypass warehouses and deliver products directly to customers. This effort is intended to reduce CO<sub>2</sub> emissions by shortening overall transportation distances.

#### Reducing the total distance products are transported by promoting delivery direct from paper mills



### Adoption of rail transport to move waste paper

Containers on trains operated by Japan Freight Railway Company (JR Freight) are used to ship products to the Tokyo metropolitan area from Nippon Paper Industries' Ishinomaki Mill. Until recently, however, those containers were being sent back to northeastern Japan empty.

Nippon Paper Industries now uses them to move waste paper back to the Ishinomaki Mill, where it is used as a raw material for making paper. Every month, roughly 2,000 tonnes of waste paper is collected in metropolitan Tokyo, loaded into containers and shipped by rail to a station next to the Ishinomaki Mill. Switching from trucks to rail transport has reduced CO<sub>2</sub> emissions by approximately 1,750 tonnes per year.

That this joint undertaking by Nippon Paper Industries, Nanko Unyu, and JR Freight, has succeeded in reducing CO<sub>2</sub> emissions was recognized by Japan's Ministry of Land, Infrastructure, Transport and Tourism, which awarded it official certification as a modal shift project.



Container-based shipping

### Obtaining Green Management Certifications

Green Management Certifications are awarded and registered by the Foundation for Promoting Personal Mobility and Ecological Transportation. Companies that undertake at least a certain minimum level of initiatives based on the Green Management Promotion Manual are eligible for these certifications.

Within the Nippon Paper Group, 17 business locations of 9 Group companies—Nippon Paper Logistics, Kyokushin Transport, Nanko Logistics Support, Hotoku, NP Unyu Kanto, NP Unyu Fuji, NP Unyu Kansai, NP Unyu Iwakuni, and New Transport—have received Green Management Certifications (as of July 1, 2014).

**Absorbing CO<sub>2</sub> through Proper Management of Company-Owned Forests**

**Sequestering atmospheric CO<sub>2</sub> in forests**

**Sequestering CO<sub>2</sub> with 206,000 hectares of forests in and outside Japan**

As trees grow, they absorb and sequester CO<sub>2</sub> from the atmosphere. As they are a major repository of carbon, it is widely recognized that the proper protection of forests helps prevent global warming.

Together with its 90,000 hectares held across 30 prefectures in Japan, the Nippon Paper Group manages 116,000 hectares of forests overseas for an aggregate total of 206,000 hectares. Through proper forest management, the Group retains its CO<sub>2</sub> absorption and sequestration capabilities. These forests, both in and outside Japan, continuously sequester approximately 34 million tonnes of CO<sub>2</sub>, thereby helping to prevent global warming.

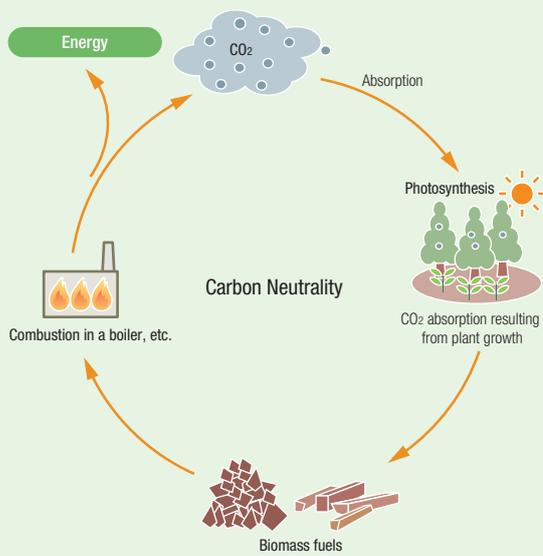
**Sequestering CO<sub>2</sub> in various wood products**

CO<sub>2</sub> sequestered in trees as carbon remains sequestered even after trees have been processed into products like construction materials and paper. Products made from wood, therefore, work to prevent increases in atmospheric CO<sub>2</sub> concentrations. Using wood products and actively recycling waste paper, in other words, by fixing CO<sub>2</sub> for extended periods of time in products, helps to hold down increases in atmospheric CO<sub>2</sub> concentrations.

When wood products like construction materials reach the end of their useful lives they can be used as carbon-neutral biomass fuel, the burning of which does not increase atmospheric CO<sub>2</sub>.

**Idea behind carbon neutrality**

Using photosynthesis, plants absorb CO<sub>2</sub> from the atmosphere. Combusting biomass fuels, therefore, emits CO<sub>2</sub> that is offset by the CO<sub>2</sub> absorbed when the plants were growing. That means there is no net increase in atmospheric CO<sub>2</sub>. This concept, described as being “carbon-neutral,” is why it is said that biomass fuels do not promote global warming and are a fuel with a low environmental burden.



**Method for calculating annual CO<sub>2</sub> sequestration volume** (amount of CO<sub>2</sub> sequestered by 1 hectare of planted softwood forest<sup>1</sup>)

**(1) Calculate volume of annual tree growth**



$$\text{Growth amount} = \text{Growth of trunks}^2 \times \text{Expansion factor}^3 = 10.13 \text{ m}^3/\text{ha}$$

5.96 m<sup>3</sup>/ha                      1.7

**(2) Express tree growth as the volume of CO<sub>2</sub> sequestered**

Growth amount (Volume)	×	Volume weight of biomass <sup>2</sup> 0.45 BDT/m <sup>3</sup>	×	Carbon factor 0.5 C-t/BDT	×	Conversion factor 44/12 CO <sub>2</sub> -t/C-t	=	<b>8.36 tonnes of CO<sub>2</sub> sequestered per year</b>
		Convert volume to weight		Calculate the amount of carbon within trees		Express carbon as CO <sub>2</sub>		

<sup>1</sup> Calculated based on information regarding evaluations of the multiple functions of forests (November 2001) published by the Science Council of Japan.

<sup>2</sup> Based on data from Nippon Paper Industries' forests

<sup>3</sup> Expansion factor: Factor used to convert trunk volume into overall biomass volume (including trunk, branches, leaves, and roots)

# Biodiversity Conservation

Pursuing activities that protect the ecosystems of our forests and apply our resources and technologies

## Basic Stance

### Pursuing activities that promote the conservation and sustainable use of biodiversity

The business activities of the Nippon Paper Group, which directly entail the cultivation and utilization of forests, therefore have an inherently significant and wide-ranging impact on biodiversity. With this in mind, we recognize that the sustainable use of forests and our ability to ensure abundant forest areas for the future are fundamental to our existence and development as a going concern.

The Group therefore maintains a deep respect for and appreciation of biodiversity. At the same time, we are committed to the objectives of the Convention on Biological Diversity, namely biological diversity conservation and the sustainable use of its components (see page 22, Sustainable Forest Management).

## Biodiversity Conservation Activities

### Engaging in activities on the basis of two core initiatives

The basic philosophy of the Nippon Paper Group Environmental Charter (see page 30) states that the Nippon Paper Group is committed to helping preserve the global environment over the long term and contributing to the development of a recycling-based society by carrying out its corporate activities in recognition of the importance of biodiversity. In addition, we have endorsed the Declaration of Biodiversity by the Japan Business Federation and participate as a declaration promotion partner.

In practicing the philosophy of our Environmental Charter, we engage in activities defined by two core principles—one, to implement initiatives through our core business activities, and the other, to leverage the Group’s resources and technologies.

## Initiatives Implemented in the Conduct of Our Core Business Activities

### Receiving the bounty of abundant forests and passing it on to future generations

#### Establishing environmental forest areas where harvesting lumber production is prohibited

Nippon Paper Industries has designated approximately 20%, or 18,000 hectares, of forest areas owned in Japan as “environmental forest areas.” In these areas, the logging of trees for the purpose of lumber production is prohibited and the environmental functions of forests (forest ecosystems, watershed conservation, etc.) are conserved. Outside of Japan, approximately 55%, or 170,000 hectares, of property held by AMCEL S.A. in Brazil is protected as a preservation area. Every effort is being made to incorporate biodiversity conservation concerns by clearly identifying preservation areas.

## Breakdown of company-owned forests in Japan

(As of March 31, 2014) (1,000 hectares)

IUCN Categories*	Commercial Forest Area	Environmental Forest Area	Total	% Share	Ratio of Environmental Forest Area
I Strict nature reserve / wilderness area	0	0	0	0%	—
II National park	0.6	4.5	5.1	6%	88%
III Natural monument	0	0	0	0%	—
IV Habitat/species management area	0	0	0	0%	—
V Protected landscape/seascape	2.5	0.7	3.2	4%	22%
VI Protected area with sustainable use of natural resources	0	0	0	0%	—
Not applicable	68.6	13.1	81.7	91%	16%
<b>Total</b>	<b>71.7</b>	<b>18.3</b>	<b>90.0</b>	<b>100%</b>	<b>20%</b>

\* Defined by the International Union for Conservation of Nature as areas set aside for the long-term protection of nature and ecosystem services, and cultural value.

## Forest certification and biodiversity

Protection of biodiversity is a key consideration for forest certification systems.

Nippon Paper Industries employs forest certification systems to benchmark its sustainable forest management. As confirmation that the company engages in forest management that takes into consideration biodiversity, all of its worldwide forests have acquired certification.

## Biodiversity surveys in company-owned forests

At Nippon Paper Industries, workers on the ground in company-owned forests carry with them information prepared for specific areas of forest based on the Red List\* compiled by the Japanese Ministry of the Environment, and perform checklist-based monitoring surveys before and after work is performed to help protect rare species.

For the company-owned Kitayama Forest in the city of Fujinomiya in Shizuoka Prefecture, the accuracy of these surveys is enhanced every few years through joint surveys. These include an ornithological survey conducted with the Wild Bird Society of Japan’s South Fuji Chapter in early summer and winter, and a flora survey conducted with the Fuji Society of Nature Observation in summer.

In addition to these surveys, we also draw on the advice of experts to establish protected forests, set limits on logging areas, and protect riparian forests in our pursuit of forestry operations conscious of the need to protect ecosystems and biodiversity.

\* List of threatened animal and plant species in Japan.

## Raw materials procurement considering biodiversity

The Nippon Paper Group also incorporates biodiversity conservation concerns into its supply chain management focusing mainly on the procurements of raw materials. Procuring raw materials from sustainably managed forests was identified under the Group’s Philosophy and Basic Policy Concerning Raw Materials Procurement formulated

in 2005. In 2006, the Group put in place an action plan for implementing this philosophy and basic policy.

### ● Reducing the environmental impact of production activities

Nature, which plays host to and nurtures ecosystems, is closely linked to a company's business activities. In this regard, efforts to reduce the environmental impact of production activities by, for example, returning to nature the water discharged from mills in as clean a state as possible and preventing global warming by curtailing greenhouse gas emissions are vital to securing biological diversity.

While recognizing its impact on the environment, the Nippon Paper Group will continue to engage in environmentally friendly production activities and reduce its environmental load.

### ● Taking into consideration the natural environment and ecosystem conservation in afforested areas

The Nippon Paper Group works to conserve ecosystems by conducting biodiversity, water quality, and various other

types of research in its afforested areas. In addition, we engage in environmental education and related activities for the benefit of young children and students in an effort to promote harmonious coexistence with the region.

#### Case Undertaking ecosystem research within company-owned natural forests (Volterra S.A., Chile)

Volterra S.A., which engages in afforestation activities in Chile, works with the University of Concepcion to regularly conduct biodiversity surveys of roughly 19,000 hectares of company-owned forests. Of these forests, approximately 5,000 hectares are natural and home to a wealth of plant and animal life, and around 2,000 hectares of this area is said to be of particularly high conservation value because of the presence of rare or endangered species. Going forward, monitoring surveys will be conducted to continue protecting biodiversity in these forests.

#### Case Conducting biodiversity research (AMCEL S.A, Brazil)

AMCEL, located in the Brazilian state of Amapa, owns approximately 310,000 hectares of land, and 55% of it, about 170,000 hectares, has been set aside as a conservation area. To preserve the ecosystem of plants and animals living there, the company is pursuing the following initiatives.

- Installation of equipment for monitoring the quality and level of water in the afforestation area, and performance of regular water inspections
- Annual provision of the conservation area for use in a wildlife release program being conducted by the Brazilian Institute for the Environment and Renewable Natural Resources
- Maintenance of a database of wildlife sightings on AMCEL's property
- With the assistance of the Department of Biological Sciences at the Federal University of Para, ongoing monitoring surveys following a 2010 mammalian habitat survey in afforested and other areas
- With the assistance of the Universidade Federal Rural da Amazonia, conduct of a savanna vegetation survey from 2011 to 2012
- Conduct of a survey of large- and medium-size mammals in the conservation area from 2011 through 2013

In fiscal 2012, a survey covering eight communities located within the conservation area adjacent to AMCEL's afforested land was conducted. Focusing on medium- and large-size mammals, it employed a questionnaire to gather sighting and other information from residents, and incorporated observations of evidence such as animal trails, fecal matter, and footprints. As one of the findings, it was determined that jaguars, which are a "near-threatened" species, live within the conservation area.

Meanwhile, another survey, also conducted in fiscal 2012, examined the tropical savanna prior to AMCEL's afforestation efforts to gather basic data on its vegetation. Of the 25 orders and 14 families of vegetation observed, 60% consisted of Cyperaceae, Poaceae, Fabaceae, Asteraceae, Malpighiaceae, and Rubiaceae.

An effort to establish baseline data for animal populations in conservation areas valued for their rare species got underway in fiscal 2013.

In addition to such regular surveys, AMCEL maintains an internal database of wildlife sightings by its employees within its afforestation and conservation areas, as an index for biodiversity preservation.



Footprints of a jaguar (a "near-threatened" species on the IUCN Red List)



Adult giant anteater ("vulnerable" species on the IUCN Red List)



Conducting a vegetation survey



Conducting an animal survey

# Biodiversity Conservation

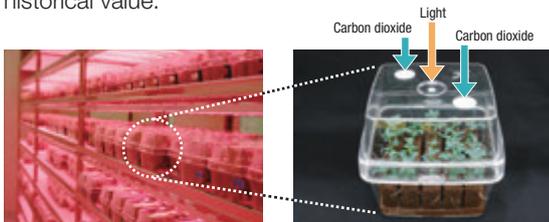
## Initiatives that Harness Company-Owned Resources and Technologies

### Contributing to the protection of a variety of plant species

#### Utilizing proprietary technologies (1)—Protecting trees of historical value

Nippon Paper Industries contributes to the protection of endangered plant species through its proprietary technology for cultivating cuttings in containers.

The technology for cultivating cuttings in containers encourages plants to root and does so through the use of a cultivating room characterized by an environment that promotes photosynthesis. Because this technology enables the propagation of even trees that failed to root via traditional cutting technology or are too old to root, it is one option for preserving endangered species and trees of historical value.



Even plant species that normally fail to root by cutting are able to root.



An example of the latter is the Tatekawa cherry tree at Reishozan Shinsho Gokuraku-ji (also known as Shinnyo-do), a temple located Kyoto. This tree is said to have been planted to mark the death of Kuranosuke Saito, the father of Kasuga-no-Tsubone, who was the wet nurse of Iemitsu Tokugawa, the third shogun of the Tokugawa dynasty. Planted over 300 years ago, it was already quite old when it was toppled by a typhoon in 1959. Efforts to save it succeed in bringing it back to the point of being able to blossom again, but it inevitably weakened due to its advanced age and attention turned to the possibility of growing a new tree from a cutting.

Confident in its technique for cultivating cuttings in containers, Nippon Paper Industries took up the challenge and, in November 2013, successfully presenting Shinnyo-do with one-meter saplings that began as cuttings from the Tatekawa cherry tree.



Saplings grown from Tatekawa cherry tree cuttings and presented to Shinnyo-do

#### Utilizing proprietary technologies (2)—restoring tidal flat environments

Tidal flats are habitats for many types of clams, crabs, and other types of marine creatures. They also play important roles as feeding grounds and rest areas for migratory birds, and as filters that break down organic matter and improve water quality. In short, they are ecosystems vital for biodiversity. Construction of ports for commercial shipping and the reclamation of land from the sea have had various impacts on coastal environments including tidal flats.

To help reverse some of these impacts, Nippon Paper Industries' Yatsushiro Mill has partnered with Kumamoto University and Fukuoka Construction K.K. to develop a new material for revitalizing coastal environments. Made from sediment dredged from seaways, paper sludge ash\*, and other waste, this new material is currently being used in a test aimed at restoring a portion of tidal flat at the Port of Yatsushiro. With the test started in February 2013, it



Tidal flat restoration

became clear in six months that around 30 species, including crabs and clams, had taken hold in the newly created tidal flat.

\* Ash remaining from the burning of paper sludge as fuel. Paper sludge is composed of fine wood fibers and other materials left over from the paper production process.

### Case Supporting the activities of the Shirane-aoi wo Mamoru Kai (Shirane-aoi Preservation Group) (Nippon Paper Industries Co., Ltd., Nippon Paper Development Co., Ltd.)

Shirane-aoi (*Glaucidium palmatum*: Japanese wood poppy) is designated as a "threatened II" species in the Red Data Book of Gunma Prefecture. To protect and breed this plant species, the Shirane-aoi Preservation Group was set up in December 2000 mainly at the initiative of Gunma Prefectural Oze High School and the residents of the village of Katashina in Tone-gun, Gunma Prefecture. As recognition of its achievements to date, it received the Greenery Day Minister of the Environment's Prize for Meritorious Service Related to the Natural Environment in April 2014.

Nippon Paper Development, which manages Nippon Paper Industries' Sugenuma Forest, has supported the operation of the Shirane-aoi Preservation Group since its inception. Nippon Paper Industries has offered a portion of the Sugenuma Forest as a plantation site for Shirane-aoi. Since 2002, the Group has called for volunteers to participate in planting and other activities.



Carefully planting seedlings

### Case Survey of Blakiston's fish owl sanctuary (Nippon Paper Industries Co., Ltd.)

In October 2010, Nippon Paper Industries entered into an agreement with the Wild Bird Society of Japan to protect birdlife. As a part of this agreement, approximately 126 hectares of forestland owned by the company in the Nemuro region of Hokkaido was identified as a sanctuary for Blakiston's fish owl. This sanctuary is home to three confirmed braces of Blakiston's fish owl.

Building a baseline of data on species is vital to protecting ecosystems with rare plants and animals. In fiscal 2013, therefore, we conducted a survey of mammals in the Blakiston's fish owl sanctuary and, with camera traps, confirmed the presence of 15 species, including 8 types of bats. That a range of large to small mammals, including brown bears, Ezo red foxes, and Hokkaido squirrels, were identified in the sanctuary indicates that its forest supports a high degree of biodiversity.

#### Sanctuary surveys undertaken with the Wild Bird Society of Japan

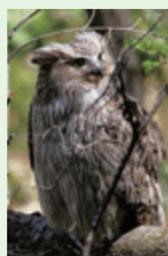
Fiscal Year	Survey Description
2010	Survey of large trees suitable as Blakiston's fish owl habitat
2011	Bird species habitat survey
2012	Nesting survey focusing on white-tailed eagles and Stellar's sea eagles, and an audio survey of nocturnal bird species
2013	Mammal habitat survey and Blakiston's fish owl habitat status survey



Camera traps installed in a forest



Wooden platform and camera trap for gathering data on small mammals



Blakiston's fish owl (Photo provided by: The Kushiro Nature Conservation Office of Japan's Ministry of the Environment)

#### Blakiston's fish owl

Standing 70 to 80cm high and weighing 3 to 4.5 kg, Blakiston's fish owl is the world's largest owl, with a wingspan of 180 cm. Formerly numbering over 1,000 and found throughout Hokkaido, Blakiston's fish owls are now found mainly in the eastern parts of Hokkaido, with confirmed numbers reduced by development and other factors to around 140, making up 50 braces. Blakiston's fish owl was identified as a national protected species in 1971, and placed on the Red List of critically endangered species by Japan's Ministry of the Environment.

### Case Agreement by Nippon Paper Industries Co., Ltd. and Coca-Cola (Japan) Co., Ltd. to conserve and protect forest and water resources

In October 2013, Nippon Paper Industries Co., Ltd. and Coca-Cola (Japan) Co., Ltd. concluded a basic agreement to protect the diversity of functions performed by forests and promote sustainable development for local communities. Nippon Paper Industries has historically worked to protect forest resources, while the Coca-Cola System has done the same for water resources. In signing the agreement, the two companies have made commitments to collaborate in conserving and protecting forest and water resources, and

ultimately develop the initiatives each company has pursued to date into activities that enhance the varied biodiversity and other functions performed by forests.



Joint press conference  
(Right) Tim Brett, Representative Director and President of Coca-Cola (Japan) Co., Ltd.  
(Left) Yoshio Haga, President & Representative Director (now Chairman) of Nippon Paper Industries Co., Ltd.

As the first collaborative activity under the agreement, the Forests, Water and Smiles—Sharing Abundant Nature with Tomorrow in Katashina Village Project was inaugurated in the Gunma Prefecture village of Katashina, the place from which water is sourced for the Coca-Cola System's two main Kanto-area plants and the location of Nippon Paper Industries' Sugenuma Forest. Under the project, environmental education classes will be used to teach children about the functions of forests and a portion of the sales of Coca-Cola products in Katashina will be donated to support local activities for the conservation and protection of forest and water resources.



Environmental education event held in the Sugenuma Forest

# Reducing Waste Generation and Final Disposal

Minimizing final waste disposal through recycling and related measures

## Reducing Final Waste Disposal

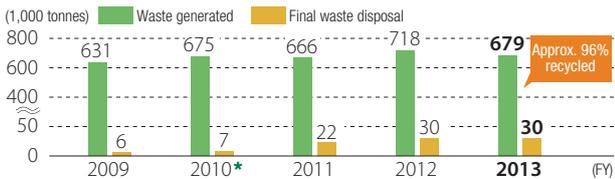
**Working to make effective use of and properly manage waste**

The amount of waste generated by the Nippon Paper Group in Japan totaled 679,000 tonnes in fiscal 2013. Of this total, approximately 80% is ash from the incineration of coal and paper sludge. The residual amount is comprised of sludge, wood waste and waste plastic.

The Group is working diligently to expand the effective use of waste, while reducing the amount of waste generated, to reduce final waste disposal.

The Nippon Paper Group also practices proper waste management in compliance with relevant laws and abides by Japan's Act for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes, which is based on the Basel Convention.

### Waste generated and final waste disposal in Japan



\* The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

## Effectively Utilizing Waste

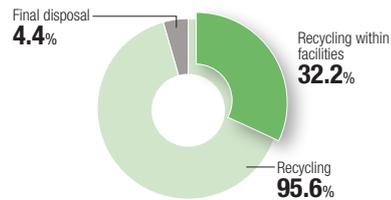
**Working to develop applications for waste**

The Nippon Paper Group is endeavoring to effectively use waste as a part of efforts to reduce the amount of final waste disposal.

Under its Green Action Plan 2015, the Group has the twin objectives of increasing the waste recycling rate to at least 97% and recycling at least 40% of waste generated within its facilities to promote the effective use of resources.

As a result of the introduction of granulation equipment to advance the effective use of ash produced from the burning of fuel, the waste recycling rate and the recycling rate of waste generated within facilities approximated 96% and 32%, respectively, in fiscal 2013.

### The ratio of recycling to the amount of waste generated (Fiscal 2013)

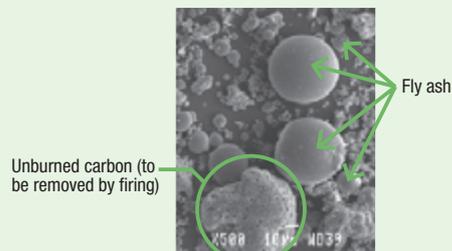


## Project for making and selling the concrete admixture CfFA®

It has long been known that fly ash, a product of coal combustion, enhances strength and useful life when used as an ingredient in concrete. The use of fly ash as a concrete admixture, however, has not taken hold because it often contains unburned carbon, which, in even small amounts, can have negative impacts on the properties of ready-mixed concrete and quality of hardened concrete.

To promote the use of fly ash in concrete, Nippon Paper Industries has adopted technology developed by ZEROTECHNO Co., Ltd., a venture company formed at Oita University. This technology, the first of its kind in the world, removes unburned carbon from fly ash through a firing process. Installation of facilities for making CfFA®, the high-quality fly ash as a concrete admixture, is proceeding at our Ishinomaki Mill, with operational startup scheduled for January 2016.

Reconstruction work is now getting off the ground in the Ishinomaki area, which suffered severe damage in the Great East Japan Earthquake. CfFA® (Carbon-free Fly Ash), as a product that makes effective use of ash from coal combustion – a waste product – to improve the quality of concrete, can make a valuable contribution to restoration of disaster area.



Electron microscope image of fly ash (prior to firing)

# Initiatives to Prevent Environmental Pollution

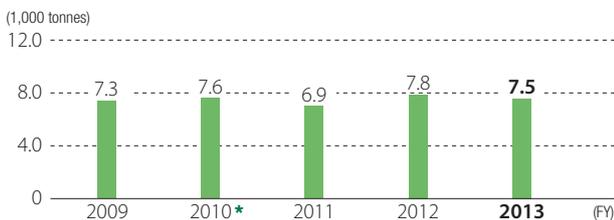
Reducing environmental load to coexist with local communities

## Preventing Air Pollution

Activities aimed at continuously reducing emissions of NOx, SOx, soot and dust

The Nippon Paper Group has installed boilers and turbines in an effort to generate power internally at its paper mills. Included in the combustion gases emitted by boilers are nitrogen oxide (NOx) and sulfur oxide (SOx), as well as soot and dust. The Group has introduced desulfurization, denitrification, dust collection, and other equipment and is working to reduce these contaminants to levels substantially lower than legal requirements.

### NOx emissions in Japan



### SOx emissions in Japan



### Soot and dust emissions in Japan



\* The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

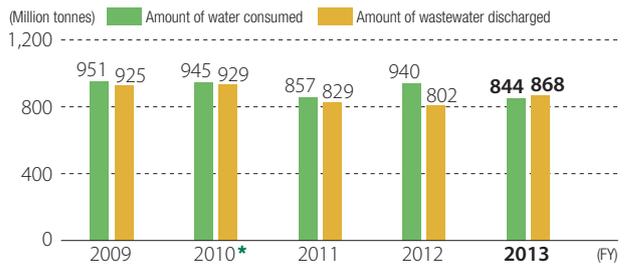
## Preventing Water Pollution

Purifying wastewater through the use of microorganisms

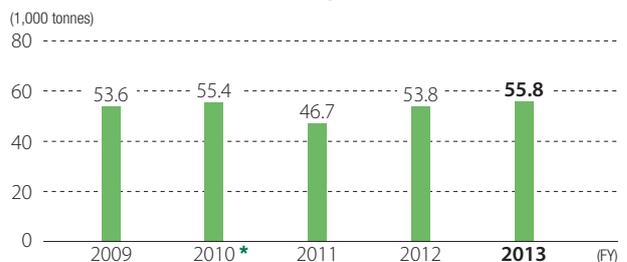
In papermaking, pulp is highly diluted with water to make a pulp suspension and then formed as a wet thin sheet. Water is removed from the sheet by drying to make paper. Water, therefore, is an extremely important element in the paper manufacturing process, and wastewater contains minute pulp fibers, filler, and other materials that are derived from wood, but are not used to make paper.

Each of the Nippon Paper Group's mills consistently measures pollutants with such indices as COD, BOD and SS, and treats wastewater before it is discharged. In addition to ensuring that contaminated substances are held below levels prescribed under the law, we are also working to reduce water pollution even further.

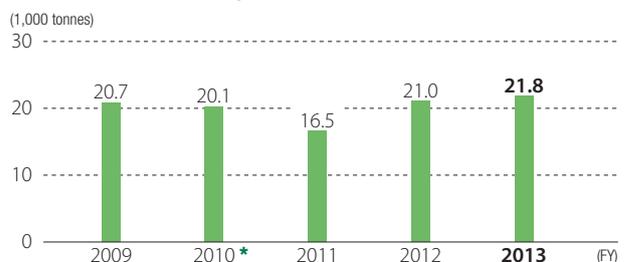
### Amount of water consumed / Amount of wastewater discharged in Japan



### Emissions of COD / BOD in Japan



### Emissions of SS in Japan



\* The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

## Initiatives to Prevent Environmental Pollution

### Preventing Noise, Vibration, and Odors

Putting in place measures to reduce the impact on areas in proximity to mills

#### Preventing noise and vibration

Since pulp and paper mills produce large amounts of paper, production equipment is substantial. As long as these machines have motors and pumps, they are a potential source of noise and vibration. In fiscal 2013, the Group received 15 complaints about noise and none regarding vibrations. Irrespective of the existence of complaints, each mill takes steps to minimize the level of noise generated and to install sound insulation facilities whenever an issue is determined to have arisen.



Before (left) and after (right) sound insulation measures have been implemented (Yatsushiro Mill, Nippon Paper Industries)

#### Preventing odors

When making kraft pulp, foul odors from substances such as hydrogen sulfide, methyl mercaptan, methyl sulfide, and methyl disulfide can be generated. The Nippon Paper Group received five complaints relating to odors during fiscal 2013. In addition to installing equipment that contains odors, we regularly measure odor levels and conduct patrols to ensure that issues do not arise. Through these means, we are endeavoring to minimize the impact of odors on surrounding areas.

### Preventing Soil Pollution

There are no instances of soil contamination at Group companies

Since the raw materials and chemicals used by Nippon Paper Group mills contain little or no heavy metals, trichloroethylene or other soil contaminants, we witness very few incidents of serious soil contamination. There were no instances of contaminated soil generated at Group companies during fiscal 2013.

### Controlling Chemical Substances

Properly managing chemical substances while pursuing efforts to limit use

#### PCB management

Given their excellent insulating properties, PCBs have been used for such electric devices as transformers. The Nippon Paper Group owns devices that contain PCBs at its facilities. Those devices that are not in use are stored in accordance with statutory requirements.

PCB waste is disposed of under contract in accordance with the detoxification plan put forward by the Japan Environmental Safety Corporation.

The status of PCB-containing devices held\* (Units)

	Transformers/ capacitors	Reactors	Stabilizers
Number of units held	446	1	5,043

\* Figures for units confirmed as held as of March 31, 2014

#### Reducing emissions of volatile organic compounds (VOCs)

The Nippon Paper Group is working diligently to reduce emissions of VOCs, widely regarded as a cause of airborne particulate matter and photochemical oxidants.

By implementing such measures as the replacement of chemicals used, the actual amount of VOCs released into the atmosphere by Nippon Paper Industries, in fiscal 2013 was 23 tonnes.

Emission of volatile organic compounds\* (Nippon Paper Industries Co., Ltd.)



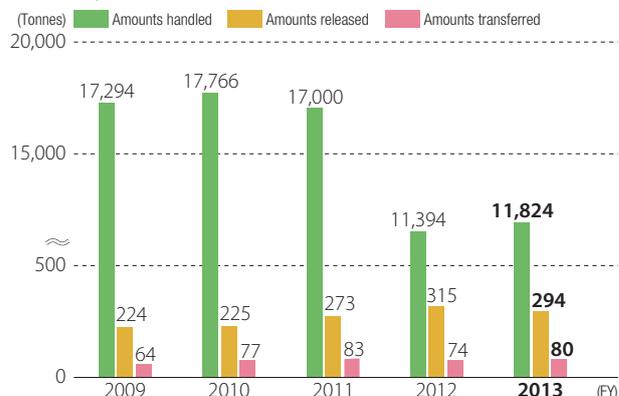
\* Amounts of less than one tonne handled have also been recorded.

### ● Responding to the PRTR Law

The Pollutant Release and Transfer Register (PRTR) is an open and public mechanism that makes clear how the wide variety of hazardous chemical substances are handled, released and transferred at facilities. The Nippon Paper Group's chemical substance releases and transfers came to 294 tonnes and 80 tonnes, respectively, in fiscal 2013. The Group is moving forward with ongoing efforts to further reduce releases and transfers of these substances by limiting their use through replacement and other measures.

The Nippon Paper Group holds risk communication meetings at its mills. Steps are taken at each meeting to explain to local residents the management and use of chemical substances subject to the PRTR Law.

### Amounts of substances subject to the PRTR Law handled, released and transferred



### Amounts of substances subject to the PRTR Law handled, released and transferred<sup>1</sup> (Fiscal 2013)

Cabinet Order No.	CAS No.	Chemical Substance	Unit	Amount Handled (Amount Generated)	Amount Released	Amount Transferred
1	—	Water-soluble zinc compounds	t	11	2	9
2	79-06-1	Acrylamide	t	1,004	0	0
4	—	Acrylic acid and water-soluble salt	t	738	0	0
6	818-61-1	Acrylic acid 2-hydroxyethyl ester	t	2	0	0
9	107-13-1	Acrylonitrile	t	2	0	0
16	78-67-1	2, 2'-azobisisobutyronitrile	t	1	0	0
48	2104-64-5	O-ethyl-O-(4-nitrophenyl)phenylphosphonothioate	t	2	2	0
57	110-80-5	Ethylene glycol monoethyl ether	t	38	1	7
80	—	Xylene	t	29	4	0
98	79-11-8	Chlorodifluoromethane	t	1,555	0	0
127	67-66-3	Chloroform <sup>2</sup>	t	297	167	17
144	—	Inorganic cyanide compounds (except complex salts and cyanates)	t	2	2	0
149	56-23-5	Tetrachloromethane	t	23	0	23
154	108-91-8	Cyclohexylamine	t	4	1	1
213	127-19-5	N, N-dimethyl acetamide	t	66	0	0
232	68-12-2	N,N-dimethylmethanamide	t	6	0	6
243	—	Dioxins <sup>3</sup>	g-TEQ	4	0	7
272	—	Copper salts (water-soluble, except complex salts)	t	2	2	0
296	95-63-6	1,2,4-trimethylbenzene	t	29	4	0
300	108-88-3	Toluene	t	2,197	41	8
302	91-20-3	Naphthalene	t	418	0	0
318	75-15-0	Carbon disulfide	t	6	6	0
333	302-01-2	Hydrazine	t	1	0	0
374	—	Hydrogen fluoride and its water-soluble salts	t	27	26	0
392	110-54-3	N-hexane	t	1	0	0
395	—	Water-soluble salts of peroxodisulfuric acid	t	87	0	6
405	—	Boron compounds	t	27	27	0
407	—	Poly (oxyethylene) alkyl ether (alkyl C=12-15)	t	10	0	3
411	50-00-0	Formaldehyde	t	4,481	6	0
412	—	Manganese and its compounds	t	2	2	0
414	108-31-6	Maleic anhydride	t	30	0	0
415	79-41-4	Methacrylic acid	t	292	0	0
418	2867-47-2	2-(dimethylamino) ethyl methacrylate	t	159	0	0
420	80-62-6	Methyl methacrylate	t	8	0	0
438	—	Methylnaphthalene	t	259	1	0
448	101-68-8	Methylenebis (4,1-phenylene) diisocyanate	t	2	0	0
455	110-91-8	Morpholine	t	4	0	0
Total <sup>3</sup>			t	11,824	294	80

<sup>1</sup> A summary of the amounts of substances, excluding dioxins, handled, released, or transferred in quantities of at least 1 tonne by each Group company. Dioxins and formaldehyde are designated type 1 chemical substances.

<sup>2</sup> Includes unintentionally generated chloroform and dioxins.

<sup>3</sup> Dioxins are not included in total data.

# Promotion of Waste Paper Recycling

Contributing to the development of a recycling-based society by promoting increased use of recycled paper

## Basic Stance

### Actively promoting the recycling of waste paper

To promote effective use of resources, the Nippon Paper Group, together with customers, has built systems for collecting and using waste paper and is working with citizens' and industry groups to promote awareness and understanding of waste paper collection. In addition to bolstering its waste-paper processing capabilities, the Group is striving to improve the quality of pulp made from waste paper and to increase the number of applications of pulp.

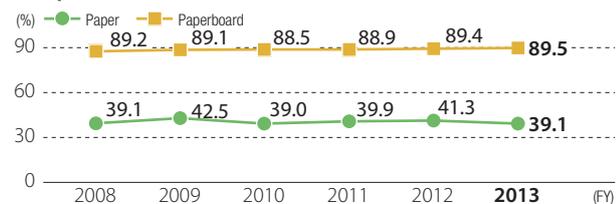
## Progress in Achieving Green Action Plan 2015

### Striving to achieve challenging recycled paper utilization goals

Under its Green Action Plan 2015 environmental action plan (see page 31), the Nippon Paper Group raised the objectives of increasing the ratio of recycled paper to paper to at least 40% and the ratio of recycled paper to paperboard to at least 88%.

In fiscal 2013 the Group reported recycled paper utilization rates for paper and paperboard of 39.1% and 89.5%, respectively. Despite difficulties in procuring recycled paper in Japan due to the rise in demand in China in recent years, we will continue to maintain and improve recycled paper utilization rates going forward.

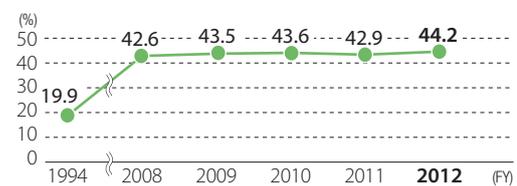
### The Nippon Paper Group's recycled paper utilization rate in Japan



### Case Initiatives aimed at recovering milk cartons (The Nippon Paper Industries)

Nippon Paper Industries Co., Ltd., a member of the Committee for Milk Container Environmental Issues, for example, is promoting activities consistent with the committee's goal of achieving a beverage carton collection rate of at least 50% by 2015. Through a variety of educational initiatives as well as the exchange of information and placement of milk carton collection boxes at schools and public facilities, we achieved a paper beverage carton collection rate of 44.2% in fiscal 2012.

#### Beverage carton collection rate



## Initiatives for Expanding the Use of Recycled Paper

### Expanding the production of products made with recycled paper in Australia

The Nippon Paper Group is working to promote recycling in its overseas business activities as well. At the Maryvale Mill of Australian Paper, in the Australian state of Victoria, we are planning to increase our production of eco-friendly products that respond to the country's heightened environmental awareness. Presently, facilities capable of producing 50,000 tonnes of waste-paper pulp annually are being installed at the Maryvale Mill with technical support from Nippon Paper Industries and assistance from the Australian government.

To date, Australian Paper has been the only company in Australia to produce recycled copier paper—an eco-friendly product. After the facilities scheduled for start-up in 2014 come on line, the company will begin to offer a wide line of products made with recycled paper and increase its production volume.



Maryvale Mill

### Case Super Jet Fiber, a heat insulation material, made mainly from recycled newspaper (Nippon Paper Lumber Co., Ltd.)

Nippon Paper Lumber manufactures Super Jet Fiber, a heat insulation material for home use, that is primarily made of recycled newspapers. In general terms, the manufacture of this product requires only one-seventh of the energy necessary for the production of more commonly used glass fiber insulation materials. The average house uses approximately 1.5 tonnes of heat insulation materials. On a morning paper subscription basis, this equates to about 20 years of recycled newspapers for one household.



Super Jet Fiber (insulator)

# Responsibility to Our Customers



## Materiality

### ● Product Development that Responds to Demands and Expectations

Stakeholder opinions are critical for bringing to our attention issues that are important for coexisting and growing sustainably with society. The ongoing existence and growth of companies depends in particular on reflecting the opinions and desires of customers, maintaining and developing products and services that are accepted by society, and addressing the heightened interest in eco-friendly products. Product development that responds to demands and expectations, therefore, is a matter of vital importance.

## Policy and Management

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## Product Development that Responds to Demands and Expectations

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A separate CSR report is prepared for SHIKOKU COCA-COLA BOTTLING CO., LTD  
<http://www.shikoku.ccbc.co.jp/environment/environment04.html> (Japanese only)

# Policy and Management

In addition to the stable supply of various products, including paper, that are indispensable to society, we continue to pursue quality and safety which meet the expectations of customers.

## Basic Stance

### Providing products and services that benefit society

The Nippon Paper Group's business activities are grounded in the supply of paper and paper products indispensable to everyday life. In this manner, we have continued to develop and grow in tune with society. We also engage in a broad spectrum of activities including the manufacture and sale of films, healthcare products, chemical products, lumber, construction materials, and refreshing beverages. Our customer base is equally wide-ranging, encompassing both the corporate sector and individuals.

Stably supplying products is a basic responsibility to respond to customer trust and benefit society, and provides the resources needed for distributing benefits to a diverse stakeholder base. With this in mind, we will work to secure the highest product and service quality as well as reliability while endeavoring to take into consideration environmental conservation across the entire product life cycle.

### Philosophy and Basic Policy on Product Safety

(established on October 1, 2004, revised on August 1, 2014)

#### Philosophy

We pledge to work to improve safety at every stage of the life cycle of our products, from design to manufacture, supply, and disposal, and to provide products and services that the public can trust.

#### Basic Policy

1. To provide safe products and services in response to the continued trust of our customers.
2. To respect related laws and standards in order to guarantee the safety of our products and services. We pursue safety not only as expected under Japanese laws but also from a global perspective.
3. To provide customers with precise information on the safety, features, and correct usage of our products.
4. To set up a product and service safety management structure and ensure that all group employees have a thorough awareness of the importance of product safety.

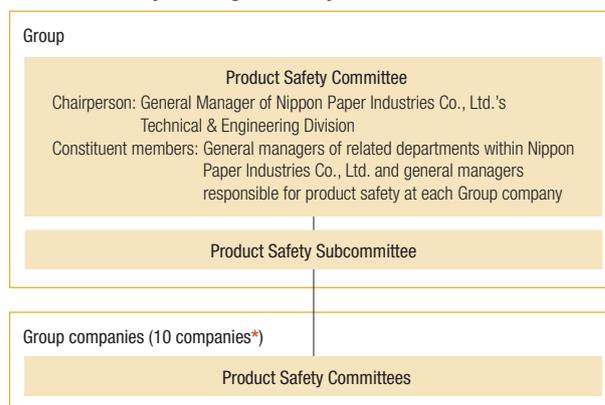
## Product Safety Management System

### Establishing a Group product safety management system

The Nippon Paper Group Product Safety Committee, chaired by the General Manager of Nippon Paper Industries Co., Ltd.'s Technical & Engineering Division oversees all activities concerning product safety. The committee, which is made up of the general managers of related departments within Nippon Paper Industries Co., Ltd. and each Group company, deliberates on and determines important matters concerning product safety policies and activities.

Reporting directly to the committee, the Product Safety Subcommittee monitors and manages activities at each Group company. Drawing on information and the exchange of opinions among Group companies, the subcommittee also deliberates on the optimal response to matters of concern. The results of these deliberations are then submitted to the Product Safety Committee. Each Group company establishes its own product safety committee and engages in appropriate product safety activities.

### Product safety management system



\* Nippon Paper Industries Co., Ltd., Nippon Paper Crecia Co., Ltd., Nippon Paper Papylia Co., Ltd., SHIKOKU COCA-COLA BOTTLING CO., LTD., Nippon Paper Lumber Co., Ltd., Kitakami Paper Co., Ltd., Nippon Seitai Corporation, NP Trading Co., Ltd., Nippon Paper Development Co., Ltd., Akita Jujo Chemicals Co., Ltd. (As of March 31, 2014)

## Approach toward Product Safety

### Strictly complying with regulations and industry standards

Nippon Paper Industries' mills and research laboratory have assembled ISO 14001 systems that guide their control of chemical substances used. At the same time, steps are taken on all statutory and regulatory compliance including the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture and the PRTR Law.

To ensure food safety and confidence, regarding products used as food containers, Japan's Food Sanitation Act and all other laws, regulations, and standards applying to paper containers for food and beverages are followed. Nippon Paper Industries' Paper-Pak Division also imports HACCP, Hazard Analysis and Critical Control Point concepts in the hygiene management of its production processes, monitors products with devices for detecting defects, and has introduced special clothing to prevent contamination of products. The division is constantly working to equip and enhance its production facilities in ways that promote stable quality and health. Furthermore, it has established a special unit to take steps toward gaining the FSSC 22000 international food safety certification and to strengthen food defense measures, a task inspired by the emergence of problems other companies have recently experienced.

● **FSSC 22000 certification obtained by the Komatsu Plant of SHIKOKU COCA-COLA BOTTLING CO., LTD.**

The Komatsu Plant\*, owned and operated by SHIKOKU COCA-COLA BOTTLING CO., LTD., was the first production facility of any company in Shikoku to acquire FSSC 22000 certification, the recognized standard for product safety.

The Gotsu Mill of Nippon Paper Industries' Chemical Division obtained FSSC 22000 certification in July 2013 for operations manufacturing carboxymethyl cellulose, cellulose powder, and stevia and licorice sweeteners.

\* As of January 1, 2014, the Komatsu No. 2 Plant of SHIKOKU COCA-COLA PRODUCTS CO., LTD. was transferred to SHIKOKU COCA-COLA BOTTLING CO., LTD. and renamed the Komatsu Plant.

■ **Initiatives for Quality Stabilization**

**Working to stabilize quality, so customers can use our products with confidence**

Each Group company actively promotes efforts aimed at acquiring ISO 9001 certification, the international standard for quality management, and engages in quality management suited to the characteristics of its products.

**Acquisition of ISO 9001 certification (As of March 31, 2014)**

Company Name	Mill/Manufacturing Companies/Woks
Nippon Paper Industries Co., Ltd. (Paper-Pak Division) <sup>1</sup>	Akita Mill, Nakoso Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Otake Mill
(Chemical Division)	Gotsu Mill <sup>2</sup> , Iwakuni Mill, Higashimatsuyama Mill, Yufutsu Mill
Nippon Paper Crecia Co., Ltd.	Tokyo Mill
Nippon Paper Papylia Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
SHIKOKU COCA-COLA BOTTLING CO., LTD.	Komatsu Plant
SHIKOKU CUSTOMER SERVICE CO., LTD.	Headquarters
Nippon Seitai Corporation	Hokkaido Office, Maebashi Mill, Saitama Mill
NIPPON PAPER UNITEC CO., LTD.	Four business sites at headquarters (construction/electricity/control systems/plant engineering)
Kokusaku Kiko Co., Ltd.	Headquarters/Equipment & Facilities Department/Yufutsu Department/Shiraoui Department/Asahikawa Department
NANKO UNYU CO., LTD.	Ishinomaki Office (Finished Product Operations/Raw Material Operations/Port Operations/Land Operations/Shipping Management Center)/Tokyo Branch/Iwanuma Office/Nakoso Office/Akita Sales Office
Nippon Paper Ishinomaki Technology Co., Ltd.	Headquarters
GAC Co., Ltd.	Headquarters/Mill, Marketing Division
FLOWRIC CO., LTD.	Headquarters, Concrete Research Center, Nagoya Mill
N&E Co., Ltd.	
Australian Paper	Maryvale Mill, Shoalhaven Mill, Preston Facility
JT Oy	Kauttua Mill

<sup>1</sup> SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD., MIKI PAPERPAK CO., LTD., and ISHIOKA KAKO CO., LTD., which are the production subsidiaries overseen by the Paper Pak Division of Nippon Paper Industries, have obtained ISO 9001 certification.

<sup>2</sup> Nippon Paper Chemicals' Gotsu Mill has gained certification for specific products.

● **Revamping of the quality assurance systems in the paper and paperboard divisions**

Aiming to create even closer relationships with customers, Nippon Paper Industries revamped its quality assurance systems in October 2013, partly by assigning employees expert in technical matters to sales divisions. Having not only sales personnel but also technical experts meet with customers has significantly improved our ability to rapidly address customer needs across a wide range areas including quality.

● **Quality audits at companies making containers for liquids**

The five production subsidiaries of Nippon Paper Industries' Paper-Pak Division undergo annual quality audits by a team which includes the division head, and pursue continuous quality improvement based on identified actual conditions (including the "5Ss"\*) in their production facilities. In addition to the quality audits, production companies also undergo food sanitation investigation focusing in particular on measures for dealing with critical microorganisms, foreign matters, and pest control. Furthermore, all five subsidiaries are working to obtain FSSC 22000 certification.

\* The 5Ss are romanized abbreviation of five Japanese words—*seiri, seiton, seiso, seiketsu,* and *shitsuke*—which mean sorting, setting-in-order, shining, standardizing, and sustaining, respectively. The 5Ss are used to maintain or improve workplace environments.



Quality audit at SOKA PAPER-PAK CO., LTD.



Checking carton quality

● **Verification and audit of waste paper pulp blending ratio**

Nippon Paper Industries has established a system for managing the percentage of waste paper pulp content in its products and guarantees these percentages to customers.

The standards and criteria of the ISO 14001 environmental management system have been incorporated into production procedures at each of the Group's mills. Within the confines of this system, steps are being taken to manage and review production procedures. The proper operation of content management systems is



A third-party audit by SGS Japan

confirmed in internal and external audits, and customers come to our mills to verify that products are being manufactured to content specifications.

## Policy and Management

### ● Responding to instances of defective products

In instances where a problem with one of the Group's products has come to light, the department in charge of quality assurance (e.g. Customer Service Office) at the relevant Group company will take the lead in coordinating with the appropriate mill and related head office departments to promptly and accurately address each issue. In the event that a problem is perceived or determined to be particularly significant or in need of urgent attention, each Group company takes the appropriate action in accordance with its Product Safety Crisis Management Manual.

At Nippon Paper Crecia Co., Ltd., which sells consumer products, contact information for the Customer Service Office is provided on all products and the Customer Service Office itself is placed directly under the president to ensure that the president is informed of all customer complaints. Furthermore, the company's website is configured to



The Customer Service Office

accept customer queries and comments. Nippon Paper Crecia consistently acts in good faith whenever its products are a cause for customer inconvenience. Every effort is made to ensure that customers are fully satisfied.

### ■ The Stable Supply of Products

#### Stable supply systems optimized by product

To provide customers with the amounts of products they need at the times they need them, we devote considerable effort to maintaining stable production by securing reliable procurement of raw materials, and systematically maintaining and upgrading our production facilities. The sales departments and production units coordinate their activities to provide customers with reliable supplies of products by developing flexible production plans that avoid waste, and managing inventories appropriately.

### ● Stable supply of newsprint

Demand is particularly high for the stable supply of paper used in such highly public information media as newspapers. As a result, the paper industry prepares emergency manuals by region for use when an extraordinary incident occurs.



Shipping products from a warehouse

In the event of a disruption to communication and transportation systems as a result of a major disaster, paper companies follow this manual to ensure the smooth supply of newsprint.

### ● Addressing natural disaster risks

The Nippon Paper Group, having learned much in the wake of the Great East Japan Earthquake, has developed practical guidelines for addressing earthquake, tsunami, and other natural disaster risks. Working from these guidelines, each mill and plant has examined the natural disaster response measures it has used to date and revised its disaster response manual.

For its part, Nippon Paper Industries, in planning for a major disaster that could either disable its headquarters or damage infrastructure so severely that its headquarters is unable to function, has established a backup facility that could immediately take over headquarters functions.

### ● Business continuity management system

To help ensure that beverages and other products reach consumers regardless of external circumstances, Nippon Paper Industries' Paper-Pak Division has developed its own business continuity guidelines and established its own business continuity management system, so that it can maintain production even in times of emergency. In particular, the division is moving ahead with plans for procurement from multiple manufacturers, especially for base paper, printing inks, and other key raw materials. It has also dispersed its paper container production facilities across four production companies—two in Ibaraki Prefecture, and one each in Saitama and Hyogo prefectures—to lower its disaster risk exposure.

### ■ Identifying Customer Needs

#### Proactive communication

The Nippon Paper Group engages in proactive communication—in everything from routine sales activities to quality patrols by technical staff—to identify customer needs across a wide range of areas.

Nippon Paper Crecia and other Group members, for example, use customer surveys to gather data on customer satisfaction and needs by product, and then use what they learn to create measures of their success in serving customers.

Nippon Paper Industries' Paper-Pak Division, meanwhile, conducts technical lectures for customers (dairy and beverage companies) providing them with information on how to properly use filling machines. At the same time, the division continuously strives to improve its products based on valuable feedback from customers.

### ● Plant tours for customers

The Nippon Paper Group actively welcomes customers for inspections and tours of mills and plants to give them a first-hand view of production facilities and, thereby, gain their understanding of production activities.

# Product Development that Responds to Demands and Expectations

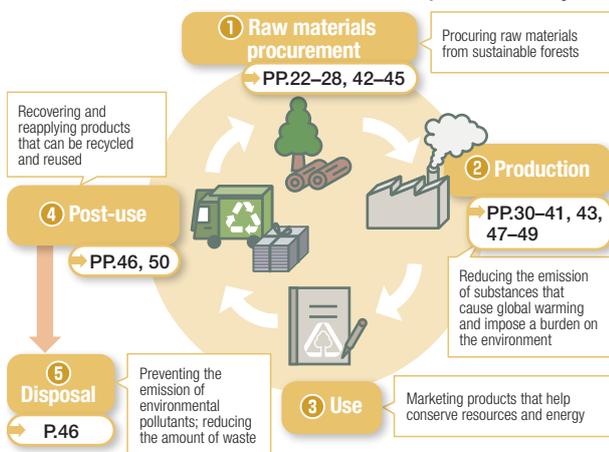
Actively Developing Products that Lower Environmental Impacts and Meet Customer Demands

## Development of Environmentally Friendly Products

### Considering every stage of the product lifecycle

The Nippon Paper Group takes into consideration environmental concerns across every stage of the product lifecycle from the procurement of raw materials through production to use and product disposal. Moving forward, the Nippon Paper Group is committed to developing environmentally friendly products.

### Points of environmental concern from a product lifecycle



### 1 Environmentally Friendly Raw Materials Procurement

#### Case Providing certified paper by starting with properly managed forests (Nippon Paper Group)

The forest certification system is composed of two components—the Forest Management (FM) component, which certifies that forests are responsibly managed from environmental, social, and economic perspectives, and the Chain-of-Custody (CoC) component, which certifies that products from certified forests have been properly processed and distributed. The Nippon Paper Group has obtained international CoC certifications at its principle mills, and provides certified paper products.

#### Status of CoC certification acquisition (as of March 31, 2014)

##### PEFC

Company Name	Office/Mill
Nippon Paper Industries Co., Ltd.	Hokkaido (Shiraoi), Akita, Ishinomaki, Yoshinaga, Fuji, Otake, Iwakuni, Yatsushiro
Nippon Paper Papyrus Co., Ltd.	Harada, Kochi

##### FSC

Company Name (License no.)	Office/Mill
Nippon Paper Industries Co., Ltd. (FSC-C001751)	Hokkaido (Yufutsu), Hokkaido (Shiraoi), Nakoso, Iwakuni
Nippon Paper Papyrus Co., Ltd. (FSC-C005984)	Harada, Kochi
Nippon Paper Crexia Co., Ltd. (FSC-C095114)	Koyo

#### Case SGEC certified MDF using 100% domestic timber (Nippon Paper Lumber Co., Ltd.)

In 2011, N&E Co., Ltd., a Nippon Paper Lumber Co., Ltd. subsidiary, was the first company in the industry to manufacture and market SGEC-certified Medium-Density Fiberboard (MDF), made from 100% domestic timber. The use of timber produced in Tokushima Prefecture is helping to revitalize local forests.



SGEC certified MDF



An example of the product used in construction

### 2 Environmentally Friendly Production

#### Case Low-basis-weight coated cardboard (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries has introduced a lightweight coated cardboard product (Floche White Card) that is suitable for use in children's books and as packaging material. While using almost 10% less raw material than previous products, this new product, even with its lower density, maintains the same level of print gloss as earlier products. Made without the use of fluorescent dyes, it also offers greater safety.

Reducing the basis-weight of products will continue to be a key focus as the company expands its offerings of environmentally conscious products.

### 3 Environmentally Friendly Utilization

#### Case Offering the lightest printing paper in Japan (Nippon Paper Papyrus Co., Ltd.)

Nippon Paper Papyrus has developed, and now sells, the lightest (18 g/m<sup>2</sup>) printing paper available in Japan (based on company research). Even with less than a third the thickness of ordinary copy paper, this paper retains suitability for use as a printing paper.

Putting the same amount of information on paper that is lighter and less voluminous results in smaller loads to ship and lower space requirements for storage.

# Product Development that Responds to Demands and Expectations

## 4 Environmentally Friendly Handling after Use

### Case Non-aluminum paper containers (Nippon Paper Industries, Paper-Pak Division)

Non-Aluminum FUJIPAK, a product of Nippon Paper Industries' Paper-Pak Division, was adopted by ITO EN, LTD. for its Jujitsu Yasai (vegetables galore) series of vegetable juice products launched in March 2014. Non-Aluminum FUJIPAK containers include no aluminum foil, so they can be collected through the same channels used for milk cartons. Made with paper – a recyclable biomass material – these containers for liquid products are friendly to the environment.

The Paper-Pak Division, in its effort to realize the full potential of the FUJIPAK system, offers a wide range of container choices to meet the needs of product manufacturers and society.



Jujitsu Yasai (vegetables galore) series products made by ITO EN, LTD. and employing Non-Aluminum FUJIPAK paper containers

## 5 Environmentally Friendly Disposal

### Case KC FLOCK® powdered cellulose made from wood pulp (Nippon Paper Industries, Chemical Division)

Nippon Paper Industries' Chemical Division markets KC FLOCK®, the brand name for the company's powdered cellulose made from wood. Cellulose is a food fiber that is not harmful to humans. Biodegradable and easily incinerated, cellulose is used extensively in food, cosmetics, filter aids and other fields.

As a filter aid, KC FLOCK® is much easier to incinerate compared with the more conventional diatomaceous earth. This helps to significantly reduce waste. In addition, when processing liquids that contain rare metals, the KC FLOCK® is able to catch the rare metals which can then be easily recovered to reuse after incineration of the KC FLOCK®.



KC FLOCK®

## Product Development that Reflects Customers' Needs

### Responding to changing quality demands

#### Case Product development at Nippon Paper Crecia

Nippon Paper Crecia goes to great lengths to develop products that meet customer needs. It pays meticulous attention to feedback received directly from customers through its Customer Service Office and sales channels, and works to develop products that meet newly emerging needs and performance demands.



Poise® Odekake Shorts  
M-size pack of 10



Poise® Pants  
For men, M-size pack of 9



Scottie® Tissue  
Disney's "Anna and the Snow Queen" design, pack of 5 boxes

#### Case Product Development in Nippon Paper Industries' Chemical Division

**Dissolving Pulp Products**—Responding to customer demands, the division has further enhanced its refining capabilities and commenced manufacturing high-concentration cellulose products.

**Carboxymethyl Cellulose**—Applications for this water-soluble polymer have expanded beyond construction material to include food products and lithium-ion batteries, as well. The products in which it is used have strict requirements for purity, solubility, and other physical properties, and we are working to further improve quality while meeting customer needs.

**Functional Coating Resins**—Primarily made of chlorinated polyolefin resin, these products are used in automobile paint, printing ink, adhesives, and a wide range of other applications due to their high adhesiveness to polypropylene. Responding to concerns raised regarding their environmental impact, we are developing non-chlorinated materials and water-dispersible products, which are more environmentally friendly.

**Functional Film Products**—Used in increasingly high-resolution LCD panels for smartphones and other devices, these products must provide a hardcoat layer free of scratches and other defects, and have subtle optical properties. The Chemical Division continues to work on expanding the bounds of possibility in these areas.



Example application for functional coating material



Example application of a functional film product

# Human Rights, Employment and Labor Responsibility



## Materiality

### ● Occupational Safety and Health

The Nippon Paper Group manages broad expanses of forest and owns large-scale production sites. Securing the safety and health of the people working at each of its business locations, therefore, is its top priority, and occupational safety and health is one of its most pressing concerns.

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# Policy and Management

Building a healthy and safe workplace environment in which employees, who serve as the driving force behind the Group's corporate activities, can take full advantage of their individual capabilities while conforming to the highest ethical standards

## Basic Stance

### Focusing on the optimal application of a diverse human resources while securing safety and disaster prevention

The Nippon Paper Group respects human rights in every aspect of its business activities and aims to develop a working environment that makes the most of a diverse range of human resources. In utilizing a diverse workforce, a partner to secure mutual growth, the Group therefore places considerable weight on building a fair evaluation and compensation system as well as education and training programs that help employees reach their full potential.

While the Group's production sites use heavy machinery and engage in inherently dangerous operations, every effort is made to maintain and enhance safe working environments and to take all appropriate measures for safety and anti-disasters.

## Philosophy and Basic Policy

### Respecting fundamental human rights and working to be a company where employees can look to a better future

In order for the Nippon Paper Group to gain the trust of society and to fulfill its responsibilities, every employee must

act with a high moral sense and strong motivation. The Group, therefore, bears important responsibilities for promoting employee awareness and behavior consistent with that principle, helping individual employees improve their capabilities, and rewarding them for their performance.

Taking all this into consideration, the Group established its Philosophy and Basic Policy on Human Rights, Employment and Labor. And employees who believe a problem may exist in any of these areas can report it via the Group's Help Line System (page 19).

## Education and Training with Respect to Human Rights

### Conducting human rights education within the Group

The Nippon Paper Group, in its efforts to exercise appropriate personnel management cognizant of human rights, pursues initiatives such as having the employees responsible for personnel matters participate in training courses hosted by government agencies. The Group has also conducted human rights education for personnel in charge of CSR at each of the Group companies.

## Concern for Human Rights across the Supply Chain

### Monitoring suppliers through surveys and interviews

Concern for human rights and labor across the entire supply chain is clearly defined in the Nippon Paper Group's Philosophy and Basic Policy Concerning Raw Materials Procurement (page 22). At the same time, the Group conducts supplier surveys and interviews to confirm that these concerns are properly addressed (page 24). In addition, Group forest management considers the culture and traditions of residents in each region of its overseas afforestation operations (page 28).

### Philosophy and Basic Policy on Human Rights, Employment and Labor

(established on October 1, 2004)

#### Philosophy

Respecting fundamental human rights at all times and making the most of the individuality and capabilities of a diverse range of human resources, we aim to create a company overflowing with dreams and hope.

#### Basic Policy

##### 1. Respect for human rights

We pledge to respect fundamental human rights and not to engage in any behavior that disregards such rights, including discrimination based on matters such as nationality, race, place of birth, sex, religion, medical conditions or disabilities, sexual harassment and the abuse of power. We also pledge to manage personal information appropriately in order to prevent infringements on privacy.

##### 2. Prohibition of forced and child labor

We pledge not to force any employees to carry out unreasonable work. We also pledge not to employ children aged under the minimum employment age stipulated in local laws and regulations.

##### 3. Promotion of personnel training and skill development

We pledge to promote personnel training and skill development programs to help improve individual employees' abilities and skills through the establishment and maintenance of structures to make the most of the individuality and capabilities of a diverse range of human resources.

### Exchanging opinions with Amnesty International Japan

Enlisting a third-party perspective to uncover human rights issues wherever in its supply chain, the Nippon Paper Group has initiated meetings to exchange opinions with Amnesty International Japan since May 2014.

Representatives of that organization were asked to meet separately with Nippon Paper Industries' Forestry Dept. and Personnel Dept. The meetings helped us to deepen our understanding of global trends in human rights issues and gave us an opportunity to explain and discuss conditions at the Group. Furthermore, given the understanding that human rights issues can exist even though compliance is practiced and has been certified by third parties, we reviewed what items should be treated as the highest priorities in undertaking a survey of current conditions.

We are committed to moving forward with the protection of human rights, step by step, within the structure of PDCA cycles.

# Occupational Safety and Health

Maintaining a workplace environment in which employees can go about their duties without undue anxiety by working daily to uncover inherent risks

## Basic Stance

**Taking into consideration the characteristics of each business to secure safety and health, and to prevent disaster**

Maintaining a safe work environment for employees is one of the basic responsibilities of any corporation. Recognizing that, the Nippon Paper Group advances initiatives emphasizing safety and health.

Irrespective of the amount of care taken, it is virtually impossible to totally eliminate all risks inherent in the workplace. It is nevertheless important to maintain an unwavering daily commitment to uncovering and minimizing these risks.

As a part of efforts to consistently engage in sound management while responding to the trust of employees, it is also important to build a pleasant and comfortable workplace that helps maintain and improve employees' health.

Therefore, the Group formulated the Philosophy and Basic Policy on Safety and Health Measures in 2004. Under this philosophy and basic policy, the Group has created labor safety and health systems and continuously strives to prevent accidents and provide safe, pleasant working environments.

### Philosophy and Basic Policy on Safety and Health Measures

(established on October 1, 2004)

#### Philosophy

In addition to acknowledging that it is the company's duty to guarantee safety and health, and to strive to develop pleasant, improved working conditions, we pledge to work ceaselessly to prevent any and all accidents, minor or major.

#### Basic Policy on Safety and Health

1. To respect the Industrial Safety and Health Law.
2. To establish self-imposed standards and step up daily management.
3. To set up a management structure and clearly define roles, responsibilities, and authority.
4. To strive to improve safety and health training.
5. To develop and maintain a safe, pleasant working environment.

#### Basic Policy on Safety and Risk Prevention

1. To respect laws and regulations pertaining to safety and risk prevention.
2. To establish self-imposed standards and step up daily management.
3. To set up a management structure and clearly define roles, responsibilities, and authority.
4. To strive to improve safety and risk prevention education and training.
5. To work in cooperation with related government and local communities and share information.

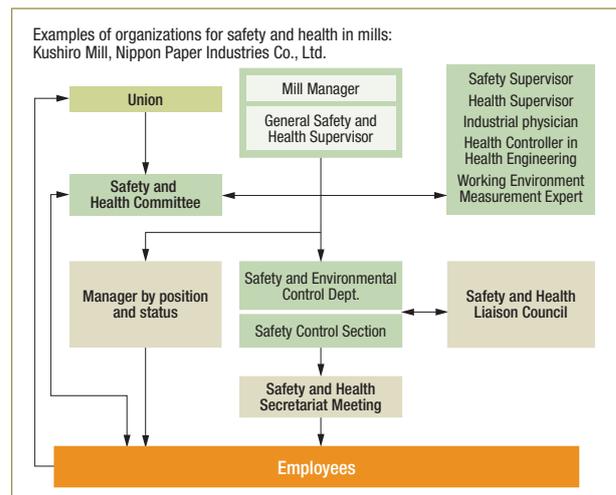
## System to Promote Occupational Safety and Health

**To build a safe workplace environment**

The Nippon Paper Group has established the Safety and Disaster Prevention Committee, which coordinates Group-wide measures on securing occupational safety and health, preventing disasters and preserving security.

At Nippon Paper Industries, labor and management occupational safety and health meetings are held once each year. The officers responsible for occupational safety and health from the head office, mills, and labor union come together to discuss a variety of issues, including the annual occupational safety and health management plan. Safety and health committees are also established at each mill and office. These committees deliberate on and determine important management matters relating to occupational safety and health as well as activity policies. Employees are notified of the details of decisions through department meetings and internal mill newsletters and then execute the determined activities.

### Structure to promote occupational safety and health



### Mill safety audit system

The Nippon Paper Group conducts mill safety audits to raise the level of safety management. In addition, mutual audits together with the auditors of other Group companies were introduced from 2010 in an effort to raise the quality of its audits.

# Occupational Safety and Health

## Occupational safety and health management system

Nippon Paper Group has adopted its own occupational safety and health management system to achieve further reductions in occupational accidents, and systematically and continuously advance safety and health activities.

### The status of occupational safety and health management system introduction

Company Name	Status of Introduction
Nippon Paper Industries Co., Ltd. <sup>1</sup>	Introduced in January 2010
Nippon Daishowa Paperboard Co., Ltd. <sup>1</sup>	Introduced in January 2011
Nippon Paper Crecia Co., Ltd.	Introduced in January 2011
Nippon Paper Papyrus Co., Ltd.	Introduced in January 2011
SHIKOKU COCA-COLA PRODUCTS CO., LTD. <sup>2</sup>	Acquired OHSAS certification in 2009
NIPPON PAPER-PAK CO., LTD. <sup>1</sup>	Introduced in January 2011
Nippon Paper Chemicals Co., Ltd. <sup>1</sup>	Introduced in January 2012
Kitakami Paper Co., Ltd.	Introduced in January 2013
NIPPON PAPER UNITEC CO., LTD.	Introduced in January 2011

<sup>1</sup> Nippon Paper Industries Co., Ltd. merged with Nippon Daishowa Paperboard Co., Ltd., NIPPON PAPER-PAK CO., LTD., and Nippon Paper Chemicals Co., Ltd. in October 2012.

<sup>2</sup> On April 1, 2014, SHIKOKU COCA-COLA PRODUCTS CO., LTD. merged with and became a part of SHIKOKU COCA-COLA BOTTLING CO., LTD.

## Reinforcing risk assessment procedures

The Nippon Paper Group adopted risk assessment procedures in 2009 as a preliminary step toward building an occupational safety and health management system. The Group has also developed its own methods, such as a three-tiered (along the reporting line) assessment system and the inclusion of third-party assessments in safety



Event for sharing safety expertise (Iwakuni Mill, Nippon Paper Industries)

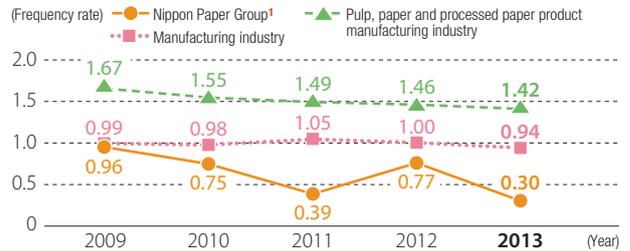
audits. It also holds events intended to promote the sharing of expertise on safety and the performance of risk assessments in an effort to raise safety standards across the Group.

## Status of Occupational Accidents

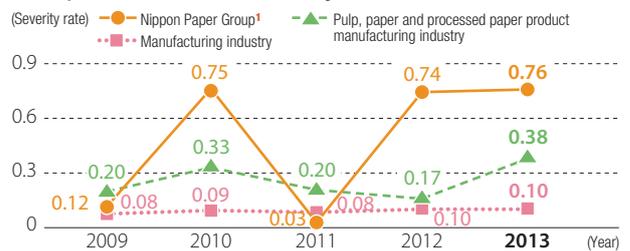
### Preventing occupational accidents

The Nippon Paper Group places the utmost importance on safety in the workplace. It is, however, by no means satisfied with its performance to date. The Nippon Paper Group<sup>1</sup> had an occupational accident frequency rate<sup>2</sup> of 0.30 and severity rate<sup>3</sup> of 0.76 for 2013. The Group is working to eliminate occupational accidents by promoting the use of risk assessments, and conducting risk prediction, patrol, and education activities.

## Occupational accident frequency rate



## Occupational accident severity rate



<sup>1</sup> The Nippon Paper Group: The manufacturing facilities of the following three Group companies: Nippon Paper Industries Co., Ltd., Nippon Paper Crecia Co., Ltd., and Nippon Paper Papyrus Co., Ltd.

<sup>2</sup> Frequency rate: Indicates how often occupational accidents occur, in terms of the number of accidents causing injuries or deaths per million work hours.

<sup>3</sup> Severity rate: Indicates the seriousness of occupational accidents, in terms of the number of workdays lost per 1,000 work hours.

## Report Incident that led to an occupational fatality

An accident resulting in an occupational fatality occurred at Nippon Paper Industries' Ishinomaki Mill on September 21, 2013.

### Overview of the incident

Location: The Ishinomaki Mill owned and operated by Nippon Paper Industries Co., Ltd.

Victim: A 30 year old employee with 5 years and 5 months working experience

Type of work: 1C/R maintenance power panel inspection

Accident: It is surmised that the employee opened a 1C/R maintenance power panel and for some reason (staggered, stumbled, etc.) fell into the charging section head first when he looked inside the power panel.

### Countermeasures:

- Hold briefings on work to be performed, even on Saturdays, Sundays, and holidays.
- Use two-person teams to open, close and inspect high-voltage power panels.
- Manage working hours more closely.

## ■ Safety Education

### Raising employee awareness toward safety through systematic education and training

The Nippon Paper Group places considerable weight on employee safety education and training. These efforts are designed to raise employee awareness toward occupational safety and health.

Nippon Paper Industries puts in place an annual Occupational Safety and Health Management System plan at each of its mills and offices. Each mill and office then implements various occupational safety and health education programs in accordance with these plans, covering every stage of an employee's career from initial hiring through to supervisor training. Constantly renewing safety awareness, the company is endeavoring to achieve incident-and accident-free workplaces.

## ■ Efforts regarding Safety and Disaster Prevention

### Steadfastly promoting a wide range of measures

#### ● In-house safety measures

Nippon Paper Industries has always endeavored to ensure workplace safety with the intention of preventing personal injury to any and all people working within its mill premises. The company has accordingly implemented safety patrols and education in collaboration with the labor union and subcontractors. Safety patrols involve designated personnel patrolling work premises to identify areas of potential safety concern as well as risky employee behavior. Since 2006, we have enhanced mill safety with measures that cover even secondary subcontractors by clarifying the responsibilities of primary subcontractors.

#### ● Safety Pledge

Nippon Paper Industries introduced its Safety Pledge in December 2013 to clarify the company's safety principles and create a uniform safety code of conduct.

Going forward, we are working with subcontractors on our premises as we redouble our efforts to promote safety.

#### ● Natural disaster and fire countermeasures

In preparation for earthquakes, tsunamis, floods, and other types of natural disasters, the various business locations of the Nippon Paper Group have created disaster preparedness manuals reflecting local hazard map



Emergency drill  
(Fuji Mill, Nippon Paper  
Industries)

information and the characteristics of their particular operations and geographic location. They also cooperate with local fire departments and other public safety authorities to conduct regular disaster preparedness training.

#### ● Putting in place fire protection teams at afforestation companies

Afforestation companies in the southwestern part of the state of Western Australia have formed their own fire brigades to address the vital issue of bushfires. As a member of this group, the Bunbury Treefarm Project (BTP), an affiliate of Nippon Paper Resources, has acquired firefighting equipment including fire trucks. Each year, regular coordination meetings and joint training events are held between afforestation companies, to constantly improve communication networks and understanding of each other's roles. Systems have been established for cooperating with the Department of Parks and Wildlife (DPaW), Department of Fire and Emergency Services (DFES), and other Western Australian government agencies specializing in fighting bushfires.

#### ● Traffic safety initiatives

Traffic safety education is offered to raise employee awareness of commuting safety. In addition, the Nippon Paper Group actively participates in various traffic safety campaigns organized by local police authorities. Every effort is made to ensure that all employees remain conscious of the need to drive safely.

## ■ Efforts regarding Hygiene and Health

### Taking into consideration the importance of mental and physical health

#### ● Maintaining and improving employees' health

The objective of the Nippon Paper Group in terms of the health of its employees is the prevention and early detection of disease. For example, at the majority of Group companies that are members of the Nippon Paper Industries Health Insurance Union, examinations focusing on lifestyle diseases are performed together with regular physical examinations. In addition, industrial physicians regularly visit workplaces. Based on the results of these visits, the Group strives to improve working environments. Moreover, the Group takes great care in supporting the health of not only employees but also their families. An opportunity for a medical examination is offered to the spouses of employees.

#### ● Tackling mental health

Nippon Paper Industries has organized Internet-based mental health care and counseling services for all employees. In addition, as a mental health maintenance measure, all employees are asked to complete an annual survey designed to detect needs for mental health care services. Employee privacy is strictly protected in the conduct of surveys and provision of services.

# Creating Workplaces that Support Diverse Human Resources

With a deep respect for fundamental human rights and the unique characteristics of each individual, the Nippon Paper Group consistently recruits new graduates and actively employs women and people with disabilities.

## Basic Stance

**Developing a dynamic organization where diverse employees can demonstrate their capabilities**

Employees with different personalities stimulating one another and helping each other deepen their knowledge serve to invigorate the workplace. Amid forecasts of a drop in Japan's working-age population (because of the declining birthrate), efforts by companies to expand the breadth of their organizations by diversifying their workforces are becoming increasingly vital to ensuring sustainable business development. Based on this understanding, the Nippon Paper Group strives to secure a diverse employee pool.

## Recruitment and Employment

**Striving to fulfill responsibilities to local communities by recruiting locally**

The Nippon Paper Group maintains a workforce of over 13,000 employees in and outside of Japan. In its efforts to fulfill its responsibility toward society, the Group strives to ensure stable employment while continuously recruiting new employees.

Furthermore, based on its Philosophy and Basic Policy on Human Rights, Employment and Labor, the Group promotes discrimination-free recruitment and employment. The Group employs a selection process that bases decisions on test and interview results. Factors including nationality, place of birth, gender and level of school completed have no place in selection decisions.

### Recruitment and other human resources data

#### 1. Number of employees on a consolidated basis (as of March 31, 2014)

Number of employees on a consolidated basis: 13,107  
(male 11,677; female 1,430)

overseas: 1,785

(male 1,531; female 254)

#### 2. Number of newly recruited employees on a consolidated basis in Japan (FY2013)

	New graduates	Mid-career recruits
Male	135	110
Female	15	13
Total	150	123

#### 3. Three-year retention rate for new graduate recruits

Nippon Paper Industries: 90.0% (main career-track position)

#### 4. Turnover

Fiscal 2013 at Nippon Paper Industries: 3.29%

#### 5. Average years of employment

(Nippon Paper Industries, as of March 31, 2014)

	Average age	Average years of employment
Male	41.9	21.1
Female	42.0	20.0
Total	41.9	21.0

#### 6. Employees who took childbirth leave, average days taken

(Nippon Paper Industries, fiscal 2013)

	Number of employees	Average days taken
Men	140	3.3
Women	13	66.0
Total	153	—

#### 7. Employees who took nursing care leave (fiscal 2013)

Nippon Paper Industries: Men 0; Women 0

### Numbers\* of overseas subsidiaries and employees by region (as of December 31, 2013)



\* Overseas subsidiaries (including non-consolidated subsidiaries)

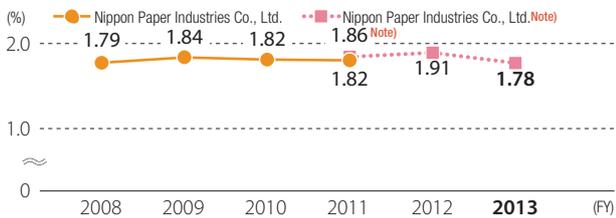
## Hiring of People with Disabilities

### Efforts to improve the rate of employment

The Japanese government set a rate for the employment of people with disabilities of 1.8% of a company's workforce, to be achieved by the end of March 2013. Nippon Paper Industries achieved this rate by 2009.

With the statutory rate having been increased to 2.0% in April 2013, the Nippon Paper Group as a whole is continuing with efforts to lift its rate for the employment of people with disabilities. As of July 1, 2014, this figure had risen to 1.99% at Nippon Paper Industries.

#### The rate of employment of people with disabilities



## Promoting the Employment of Elderly Persons

### Upgrading and expanding systems with the aim of promoting employment of elderly persons

The Nippon Paper Group long ago established the Reemployment after Retirement System to respond to the needs of an aging society and to facilitate the passing on of skills. In fiscal 2002, Nippon Paper Industries introduced a reemployment system to allow employees to work up to the age of 65. Now, it is preparing new rules that will comply with the Elderly Employment Stability Law revised in 2013. These rules will allow employees of retirement age to continue working based on their desire and skills, at least until they begin to receive pensions.

#### Reemployment performance

(Regular employees of Nippon Paper Industries)

Fiscal years	2008	2009	2010	2011	2012	2013
Number of employees seeking reemployment	50	55	62	44 (72 Note)	21 (57)	51
Number of employees reemployed*	44	52	59	43 (69)	33 (67)	53

\* Depending on staffing conditions and other factors, the company may request employees to continue working beyond the retirement age, and some employees have agreed to do this. This is why the number of people reemployed sometimes exceeds the number of retirees requesting to be reemployed.

## Women in the Workplace

### Creating greater opportunities for women

Needs to invigorate organizations and secure human resources amid a shrinking population have elevated the

importance of women in the workforce, and the Nippon Paper Group is creating conditions that promote their participation here.

Nippon Paper Industries, for example, has moved to help employees with children meet both work and home responsibilities through measures like extending its childcare support policies to allow the use of accumulated leave (expired annual paid leave) to care for children up through the time they begin to attend elementary school. The company has also expanded career opportunities for women by actively assigning career-track employees to mill positions.

## Female management participation and recruiting

The percentage of women in our management ranks is low. At Nippon Paper Industries a large proportion of jobs is in mill settings and so low recruitment of women in the past is a major reason for the low participation in our management ranks now. To help remedy this situation, the company is recruiting women into career-track positions with the objective of exceeding a minimum percentage.

#### Percentage of female employees in management (consolidated entity in Japan)



Beginning with fiscal 2013 percentages have been adjusted retroactively to exclude associate directors, employees commissioned for specific purposes, employees on temporary assignment from other companies, and other non-full-time personnel to present percentages of only full-time employees.

#### Percentage of female employees in management (consolidated subsidiaries outside Japan)

(as of December 31, 2013)

16.0% (Managerial personnel at the level of section manager or above [section manager, department manager, etc.])

#### Number of new graduates hired

(Nippon Paper Industries Co., Ltd., main career-track position)

Fiscal years	2008	2009	2010	2011	2012	2013	2014
New graduates	51	38	33	16 (31 Note)	17 (37)	43	56
Women	9	8	6	3 (5)	2 (3)	6	8
Men	42	30	27	13 (26)	15 (34)	37	48
Percent women	18	21	18	19 (16)	12 (8)	14	14

**Note:** Nippon Paper Industries Co., Ltd. merged with Nippon Daishowa Paperboard Co., Ltd., NIPPON PAPER-PAK CO., LTD., and Nippon Paper Chemicals Co., Ltd. in October 2012. Changes over the fiscal 2011–2012 period (shown in graphs with ●■◆ and in tables with ( )) reflect the sum of data for these three companies.

# Creating Workplaces that Support Diverse Human Resources

## ■ Promoting Work-Life Balance

### Realizing an ideal workplace environment that balances work and family concerns

The Nippon Paper Group strives to establish an ideal workplace environment that allows employees to reach their full potential while balancing work and family needs.

Nippon Paper Industries, for example, has introduced flextime work hours for its head office, research facilities, branches, and the administrative sections of its mills.

### ● Complying with the Act on Advancement of Measures to Support Raising Next Generation Children

The Nippon Paper Group has put in place an action plan and strives to support its employees in maintaining work and child-care balance in accordance with Japan's Act on Advancement of Measures to Support Raising Next Generation Children.

As one example, Nippon Paper Industries revised its systems in line with revisions to Japan's Child Care and Family Care Leave Act. The company has continued to implement systems that exceed the provisions stipulated under revised legislation. This includes extensions to the exemption period for overtime working hours, the application period for child care and paid leave for child rearing.

#### Action Plan in Response to the Act on Advancement of Measures to Support Raising Next Generation Children

(Nippon Paper Industries: revised in April 2013)

1. Improve the actual taking of child care leave  
One or more male employees taking child care leave during the period of the plan (April 2013–March 2015), 80% or more of female employees taking child care leave
2. Reduce total hours worked and promote the taking of annual paid leave
3. Strengthen support for the development of the young people who will lead the future. Do this by providing workplace tours, hands-on vocational education opportunities, etc.

#### Numbers of employees who took childcare leave (fiscal 2013)

Nippon Paper Industries: Men 1; Women 12

#### Working hours and paid leave taken

(Avg. for regular employees of Nippon Paper Industries Co., Ltd.)

Fiscal years	2008	2009	2010	2011	2012	2013
Total number of working hours	1,841	1,776	1,792	1,744 (1,759 <sup>Note</sup> )	1,836 (1,821)	1,831
The rate of annual paid leave taken by employees	73.5	67.7	73.0	68.0 (65.2)	74.4 (69.3)	70.9

#### Case Using the Trial Employment system for recruitment (Yoshinaga Mill, Nippon Paper Industries)

The Ministry of Health, Labour and Welfare is promoting "Trial Employment" system under which people are hired in principle for three months with the presumption that they will be transitioned to full-time employment afterwards. This system is intended for the benefit of people who, perhaps because of a lack of work experience, are uncertain about taking on a full-time job.

The Yoshinaga Mill used this system when it first began to hire people with disabilities, and used the three-month trial period for on-the-job training. Hands-on job experience over this period gave participants and the company a chance to develop clearer understandings of each other and resulted in participants joining the company as full-time employees.

## ■ Industrial Relations

### Improving the workplace environment through labor and management consensus

The Nippon Paper Group strives to maintain a sound relationship with its employees. Labor unions have been formed at Nippon Paper Industries and the majority of its consolidated subsidiaries. Irrespective of the existence of a labor union, however, every effort is made to promote smooth industrial relations at all Group companies.

For example, under the common objective of building a better company, Nippon Paper Industries has established a variety of committees that cover such fields as the operations of labor and management agreements, and staffing adjustments. Discussions with mutual respect and agreements between the two provide the basis for a variety of initiatives, as well as efforts to improve the workplace environment. On the top of these endeavors, regular central meetings of both sides' leaders provide a forum to discuss diverse issues including corporate management.

### ● Discussions of working conditions

Major changes to working conditions, such as alterations to personnel systems and personnel downsizing, are in principle implemented on the basis of prior discussions between labor and management. As a result, companies within the Nippon Paper Group do not unilaterally impose changes on employees.

Routine communication is critical for gaining employee understanding of company actions. The Group strives to engage in dialog with employees and labor union to provide such information as financial results.

**Note:** Nippon Paper Industries Co., Ltd. merged with Nippon Daishowa Paperboard Co., Ltd., NIPPON PAPER-PAK CO., LTD., and Nippon Paper Chemicals Co., Ltd. in October 2012. Changes over the fiscal 2011–2012 period (shown in tables with ( )) reflect the sum of data for these three companies.

# Cultivating Human Resources

Supporting efforts to enhance the capabilities of each employee, while implementing proper evaluation systems based on skills and performance

## Basic Stance

**Recognizing that employees are important partners, the Nippon Paper Group strives to build sound relationships and cultivate human resources**

The Nippon Paper Group places considerable emphasis on building positive ties with employees and developing human resources. At the same time, the Nippon Paper Group continues to build a mechanism whereby motivated and capable individuals can improve their skills by equitably offering opportunities to learn. Furthermore, every effort is made to assign the right persons to the right positions, and to provide fair evaluation and compensation.

## Initiatives Aimed at Developing Human Resources

### Taking measures to address key issues

In reinforcing its mechanism for human resource development, the Nippon Paper Group focuses its attention on the following five areas: (1) support for self-development and voluntary career planning; (2) assignment of the right people to the right positions; (3) development of human resources capable of acting on a global stage; (4) reinforcement of production frontline capabilities; and (5) support for the development of lifelong as well as career plans. Complementing these endeavors, the Group is also building a Global Human Resources Bank and conducting joint training among group companies.

## Support for self-development and voluntary career planning

The Nippon Paper Group supports employee self-development and voluntary career planning through means such as correspondence courses, group training, and rewards for acquiring professional qualifications. In addition to existing training programs for various stages throughout each employee's career, Nippon Paper Industries is expanding learning opportunities to provide employees with a wide-ranging curriculum from which to select skill training they themselves consider necessary. In fiscal 2013, for example, we increased to 140 the number of correspondence courses full-time employees can take to study management, accounting, and languages, and to acquire professional qualifications.

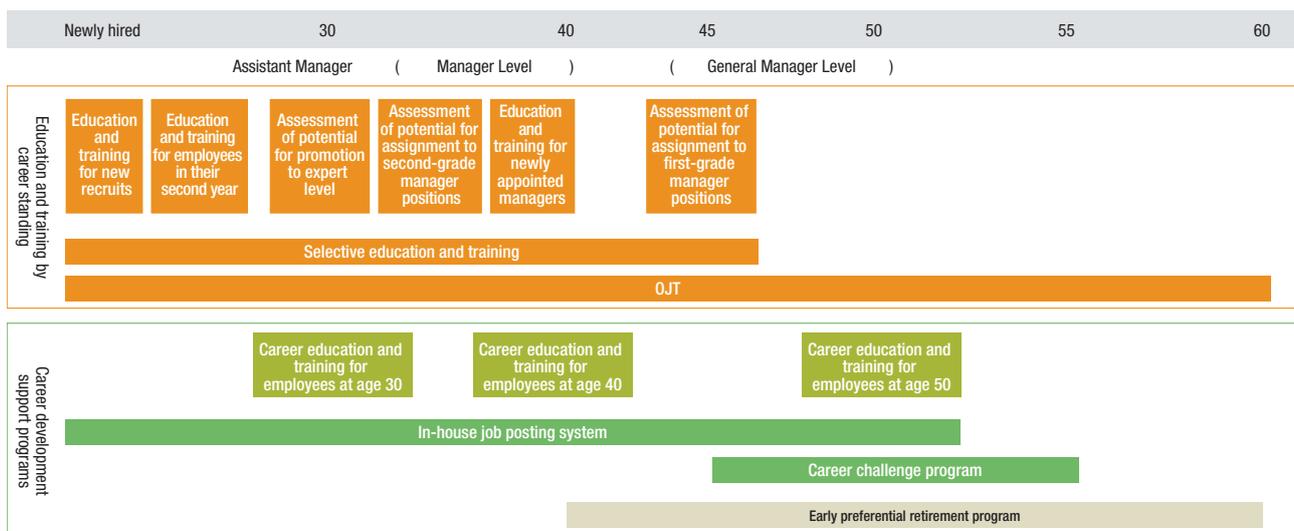
Moreover, steps were taken to introduce various age-based career training programs for employees at 30, 40, and 50 in fiscal 2007. These programs help identify the strengths and weaknesses of individual employees through comprehensive job analysis and 360-degree feedback.



Career development training (Nippon Paper Industries)

## Outline of the education and career development support system for career-track employees

(Information on Nippon Paper Industries for fiscal 2013)



## Cultivating Human Resources

### ● Assignment of the right people to the right positions

Nippon Paper Industries periodically surveys employees to ascertain what kind of job assignments they wish to have. Based on the results of these surveys, every effort is made to match employee strengths with job types.

In addition, Nippon Paper Industries launched the in-house job posting system in fiscal 2005. The 46 programs initiated to date have attracted 79 applications. After completing the necessary screening process, 31 employees were subsequently transferred.

### ● Development of employees capable of acting on a global stage

Recognizing the need to foster personnel who possess a global perspective in future overseas business development endeavors, Nippon Paper Industries and other Group companies have put in place an open-application overseas study program. This program is supported by the dispatch of personnel to overseas education institutions and by overseas assignments to the various offices of Nippon Paper Group.

Nippon Paper Industries is building the Global Human Resources Bank, a list of personnel with experience either working or studying overseas, or with advanced language skills in an effort to better address global expansion, which continues to progress at an accelerated pace.

At the same time, special education and training programs will be introduced to efficiently foster personnel who can excel on the world stage. Currently, 470 personnel are registered with the bank.

#### Case Implement small group activities globally

The Nippon Paper Group is implementing small group activities at business locations including overseas mills and plants. "Small group activities" refers to groups comprised of just a few people and working to achieve improvements in areas such as operations, quality, and costs.

At the 21st (2013) Group-wide presentation meeting, attended by roughly 320 people, including the Group president and other members of top management, ten select teams, representing eight domestic mills and two overseas mills, gave presentations explaining what they had accomplished. All



Presentation of awards to the excellent performance groups

of the presentations provided opportunities for attendees to better understand their own workplaces in greater detail and consider examples of good practices from other workplaces in Japan and abroad.

### ● Reinforcement of production frontline capabilities

Human resource capabilities at the production frontline represent the heart of the manufacturing process and are vital to the Group's existence as a going concern amid increasingly harsh competition. The Nippon Paper Group passes on to each generation the technologies and skills nurtured over a lengthy period to maintain and improve the capabilities of its human resources.

Nippon Paper Industries organized the "Committee to Study the Strengthening of Mill-Level Production Frontline Capabilities" in fiscal 2006. The company also conducted education activities aimed at introducing this initiative across all mills in fiscal 2007. Based on these endeavors, activities aimed at strengthening the frontline have been undertaken at all mills since fiscal 2008. Nippon Paper Industries has implemented education and training to carry forward the technologies and skills that are needed at each production site or by each individual.

### ● Support for the planning of life and career

In recent years, there has been a rise in the age at which public pension payments begin, and increasing diversification of lifestyles. Employees must therefore consider a number of factors when planning their careers and life after retirement. Against this backdrop, and in an effort to allay the concerns and anxieties of employees, core companies within the Nippon Paper Group offer Life Plan Seminars to enhance employee understanding of each company's and the government's programs, as well as the need to develop meaningful life plans that include health management.

### ■ Fair Evaluation and Compensation

#### Fair employee evaluation based on skills and performance

As part of its efforts to practice fair and transparent personnel evaluations, Nippon Paper Industries lays out clear evaluation criteria and conducts review sessions, in which managers provide feedback on performance evaluations, for all regular employees.

Having employees meet with managers individually promotes greater understanding and acceptance of evaluation results, and is an opportunity to provide individual employees with guidance for skill development.

In addition, the company commissions assessments from specialist external parties in an effort to boost the objectivity of its evaluation process with respect to the appointment screening of management and other positions.

In ensuring that employees are fully informed of the detailed results of their evaluation based on clearly defined criteria, the company encourages employees to recognize their strengths and areas where they need more work. This helps to further motivate employees toward skills development.

# Community Responsibility



## Materiality

### ● Activities Aimed at Promoting Coexistence with Local Communities and Society

As a comprehensive biomass enterprise developing new products and growing its businesses, the Nippon Paper Group manages broad expanses of forests and owns large-scale production sites, so it has significant impacts on local communities and the people who live and work in them.

Coexistence with these communities is critical to our own continued existence, and activities that promote harmonious relationships with them and with society at large are a key concern.

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### Activities Aimed at Promoting Coexistence with Local Communities and Society

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# Policy and Management

The Nippon Paper Group engages in a variety of social contribution activities to garner the trust of and remain close to local residents.

## Basic Stance

### Pursuing a wide range of activities for coexisting with local communities and other purposes

The Nippon Paper Group is helping to build a sustainable society by effectively and appropriately utilizing trees, a renewable resource, to produce a variety of products including paper.

The initiatives we engage in, both inside and outside Japan, include cleanups of the areas around our mills and plants, support for vocational training in afforestation areas, and other locally focused activities; and operation of the School of Friendship for Forests and Paper, and other activities making use of forests and other Group resources.

### Philosophy and Principles for Social Contribution Activities

(established on April 1, 2004)

#### Philosophy

As a member of society, we shall proudly promote activities that contribute to social development.

#### Principles

1. We shall pursue activities that contribute to cultural heritage and development.
2. We shall pursue activities that contribute to conservation and improvement of the environment.
3. We shall pursue activities that contribute to the development of communities.

### Specific activity themes

- Increase the community involvement of Group company mills and overseas affiliates
- Promote activities that effectively utilize the resources and specialist expertise of each Group company
- Promote corporate citizenship activities in which our employees play an active role
- Effectively use the company-owned forests in Japan (about 90,000 hectares)
- Employ effective PR inside and outside the Group

### Structure for promoting social contribution activities

The CSR Division takes the lead in promoting Group-wide social contribution activities. Each Group company appoints a person responsible for overseeing social contribution activities. Each responsible person develops a thorough understanding of social contribution activities undertaken to date, and works to upgrade and expand their content and details.

### The Nippon Paper Group's principal social contribution activities

Principal activities	Specific examples	Page
<b>Activities aimed at promoting coexistence with local communities</b>		
Cleaning activities	Activities in areas surrounding the Group's sites	—
Local community safety and disaster prevention	Activities focusing on the safety of children	—
	Participation in fire brigades	61
Local development	Fostering of local specialty products	69
Preserving local community cultures	To preserve Japan's precious cherry blossoms	44
	Supporting Asukayama Takigi Noh plays	—
	Considering the needs of native populations	69
Coexistence with local communities	Participating in and sponsoring local events	—
	Opening of recreational facilities to the public	—
	Holding events including festivals	69
<b>Activities aimed at promoting coexistence with society</b>		
Social welfare activities	Participating in social welfare events	—
	Purchasing products made by social welfare groups	—
Community education	Holding of CSR lectures (public seminars)	—
Advancing science and technology	Financial support to the Fujihara Foundation of Science	69
Disaster relief activities	Volunteer activities, provision of relief supplies	—
<b>Environmental activities</b>		
Tree planting activities	Tree planting activities	70
Preserving biodiversity	Utilizing the Group's in-container rooting tech	44
	Activities to protect the Japanese crane	70
	Promoting Morino Chonai-kai activities	—
	Establishing a sanctuary for Blakiston's fish owl	45
	Supporting the activities of the Shirane-aoi Preservation Group	44
	Operating the Recycle Plaza Shiyukan	—
Promoting recycling activities	Supporting the recycling activities of organizations	50
	Recycling waste paper	70
	Recycling wood waste	70
	Recycling milk cartons	50
<b>Educational activities</b>		
Field trips	Organizing tours of the Group's mills	71
Utilizing company-owned forests	Holding the School of Friendship for Forests and Paper programs	71
Job training	Vocational training for local citizens	71
	Promoting internship programs	—
Music appreciation	Inviting students to concerts	—
Sports clinics	Baseball clinics and tournaments	71
	Ice hockey classes and championships	—
	Holding unicycle classes	—
Providing products to classrooms	Provision of paper products, printed materials and publications	—

## Activities Aimed at Promoting Coexistence with Local Communities and Society

Working in partnership with municipalities and residents to help build more comfortable living environments while preserving cultural traditions and invigorating regional economies

### Regional Development

#### Case Fostering locally produced products in partnership with local communities (Volterra S.A., Chile)

Volterra S.A. appoints a designated officer to serve as a point of contact for the local community. In addition to fielding requests from neighboring residents, particular care is taken to balance afforestation business promotion and regional development needs.

As part of that effort, Volterra began in 2011 to support the efforts of a neighboring village to cultivate raspberries as a new specialty crop. Working closely with another neighboring village, the company also assisted in efforts to manufacture folk handicrafts made from locally produced wicker cane.



Folk crafts made with wicker cane



With neighboring residents following the initial harvest of raspberries

### Preserving Local Community Cultures

#### Case Respect for indigenous people (Nippon Paper Industries USA Co., Ltd.)

Port Angeles, Washington, the home of Nippon Paper Industries USA, is also the home of the Lower Elwha Klallam Tribe (LEKT) of Native Americans. When it came time to install a new boiler at its Port Angeles Mill, Nippon Paper Industries USA, together with representatives of the US government and other parties, talked with the LEKT to determine what had to be paid attention to in performing the necessary civil engineering construction work. As a result of discussions, the company learned what it should do if buried objects were discovered and agreed to have an archaeologist with knowledge of LEKT cultural treasures, or, alternatively, an LEKT member, on hand to monitor excavation work.

In performing the construction work, Nippon Paper Industries USA strictly abided by the terms agreed upon with the LEKT and enjoys a good relationship with the tribe.

### Coexistence with Local Communities

#### Case The Happy Shikoku Project (SHIKOKU COCA-COLA BOTTLING CO., LTD.)

Shikoku Coca-Cola Bottling Co., Ltd. has launched the Happy Shikoku Project in its effort to promote interactive CSR activities. The purpose of this project is to gather ideas for bringing joyful events to Shikoku. Ideas, received through a website and other channels, are implemented with a portion of the company's sales.

The project has materialized as a sports event organized by the members of a youth sports league for parents in Kagawa Prefecture; an event with 19 activities aimed at helping preschoolers discover the fun and possibilities of sports in Ehime Prefecture; a tree-planting event aimed at beautifying select areas, mainly by adding cherry trees, in Kochi Prefecture; and an initiative to revitalize a shopping street by setting up a haunted house in vacant store space in Tokushima Prefecture. In total, the project has carried out 23 events throughout Shikoku, attracting over 17,000 visitors and winning strong support for its efforts.



Awa Genju Yashiki haunted house in Tokushima

### Advancing Science and Technology

#### Case Supporting the Fujihara Foundation of Science (Nippon Paper Industries Co., Ltd.)

Considered the "Nobel Prize of Japan," the Fujihara Award, presented by the Fujihara Foundation of Science, a public interest incorporated association, recognizes outstanding contributions to science and technology by Japanese scientists. Nippon Paper Industries lends financial support to the Foundation to promote science and technology.

In June 2014, the 55th Fujihara Award was bestowed on Dr. Eiichi Nakamura, a Professor at the School of Science at the University of Tokyo, and Dr. Yasushi Miyashita, a Professor at the Graduate School of Medicine at the University of Tokyo. Each received a gold medal, certificate, and ¥10 million, as a supplementary prize.



A commemorative photograph taken after the presentation ceremony

# Environmental Activities

Placing particular emphasis on environmental conservation activities such as ecosystem protection, recycling, and greening, that consider the characteristics of individual regions and mills

## Tree-Planting Activities

### Case Marunuma Highland Tree-Planting 2014 held (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries is advancing initiatives aimed at leaving a thriving forest to future generations. As part of that effort, tree-planting activities were begun in the company's Sugenuma Forest in Gunma Prefecture in May 2010. The third iteration of this activity—the Marunuma Highland Tree Planting 2014—took place in May. The number of participants—both Nippon Paper Group people and others, mainly from Tokyo—came to about 100 in all.

Under the guidance of staff, participants used transplanting trowels to efficiently plant 1,000 seedlings of five types of trees in around 30 minutes. Going forward, Nippon Paper Industries plans to continue holding tree-plantings.



Planting seedling one at a time on a slope

## Preserving Biodiversity

### Case Providing learning opportunities through crane protection (Nippon Paper Cranes ice hockey team)

The Nippon Paper Cranes help to protect the environment of the Kushiro-shitsugen (Kushiro marsh) and contribute to the local community by participating in an annual event the Wild Bird Society of Japan holds to create a feeding ground for Japanese cranes. Once threatened with extinction, Japanese cranes are now increasing their number year by year with the help of protection activities. Under present circumstances, however, they find it impossible to get through the winter without food provided by humans. To help them find food on their own, therefore, efforts are made to clear underbrush along riverbanks to allow the birds easier access to the rivers, where they feed. Monitors installed in places where underbrush has been cleared make it possible to see the cranes feeding in the rivers and give participants a real sense of what they have accomplished.

Seeing the benefit of their efforts, the Nippon Paper Cranes intend to continue helping to protect the birds for whom they are named.



Clearing underbrush

## Promoting Recycling Activities

### Case Promoting wastepaper recycling activities (Nippon Paper Industries Co., Ltd., Kitakami Paper Co., Ltd.)

Aiming to be an urban resource recycling facility, Nippon Paper Industries' Yoshinaga Mill has established large-scale wastepaper recycling stations at two off-site locations to promote the saving of resources. Though wastepaper is already being collected as a city service, residents must take it to a designated location on a designated day of the week for collection at a designated time. The ability to take wastepaper to the Yoshinaga Mill's off-site facilities at any time of day, therefore, has won praise from residents who like that they no longer have to deal with the trouble of having to keep wastepaper at their homes until collection day. Looking to the future, the mill plans to encourage greater use of its facilities by local residents as part of a 24-hour wastepaper collection project.

Kitakami Paper Co., Ltd., meanwhile, has established its wastepaper collection facility on the grounds of its mill. The residents and small and medium enterprises of Ichinoseki City are allowed to freely bring their wastepaper to this facility, which accepts paper items including container board and used magazines. Money from the sale of this wastepaper is contributed to a fund benefitting the city.



Wastepaper collection facility

### Case Promoting the recycling of wood waste (Nanei Co., Ltd., a Nippon Paper Lumber Co., Ltd. Subsidiary)

Nanei, a company that performs silviculture and logging services in Nippon Paper Industries' and other forests, also makes woodchips used for manufacturing paper and generating electricity, and specializes in the intermediate processing of wood waste. Operating in the Kumamoto Prefecture city of Yatsushiro, Nanai uses a tub grinder to turn tree waste from garden shrubs, wooden pallets and other wooden materials into fine particles that can be used as boiler fuel, or raw material for particle board. Some of this material is also mixed with sawdust and used as bedding for livestock. Recently, Nanai has begun to take in tree waste that would otherwise have gone to the city waste incinerator, significantly reducing the city's waste processing burden.



Bringing tree waste in

# Educational Activities

Playing an important role in providing children with a variety of learning opportunities

## ■ Providing Opportunities to Tour Group Companies and Their Mills

In fiscal 2013, 8,050 elementary, junior and senior high school students toured the Group's production facilities.

## ■ Utilizing Company-Owned Forests in Japan

### Case Conducting the annual School of Friendship for Forests and Paper (Nippon Paper Industries Co. Ltd., Nippon Paper Development Co., Ltd.)

The School of Friendship for Forests and Paper is a hands-on course on the natural environment utilizing forests (approximately 90,000 hectares) owned by Nippon Paper Industries in Japan. With the aim of introducing participants to the beauty and abundance of forests owned by the company, the school is also an opportunity to experience the connection between forests and paper, an essential item for everyday life. This initiative was first launched in the Sugenuma forest of Gunma Prefecture, one of the company's typical metropolitan-based forests in October 2006.

The common programs that make up the school draw heavily on the knowledge and experience of employees. With Group employees serving as guides, for example, participants enjoy walking through the forest and making paper from twigs they pick up. Participants are gathered from general public with the cooperation of the Japan Philanthropic Association. Despite its cancellation in the spring of 2011 due to impact of the Great East Japan Earthquake, the Sugenuma forest school has been held on an annual basis since its inception. June 2014 marked the 16th time the school was held. Over this period a total of 545 children, parents and local high school students have attended the school.

Since 2007, the Toyono School of Friendship for Forests and Paper has been held in Nippon Paper



Walk in a forest owned by Nippon Paper Industries



A ceremonial photograph of all involved parties

Industries' Toyono forest in Kumamoto Prefecture. Organized mainly by the company's Yatsushiro Mill, particular emphasis is placed on activities deeply rooted in the local community. One program of this school incorporates such activities as a mill tour and is one example of how activities are modified to accommodate the needs of each region.

## ■ Providing Opportunities for Work Experience

### Case Engaging in employment support activities for people throughout the region (AMCEL, Brazil)

AMCEL is conducting employment as well as job training in conjunction with local engineering and commercial training schools at the request of the State of Amapá, other local governmental bodies at various levels, and regional communities. Each year, the company is a major sponsor of such education programs as the Escola da Madiera (lumber school)<sup>1</sup> and Youth Project<sup>2</sup>,



Practical training in lumber processing at the Escola da Madiera (lumber school)

open to young people and the economically disadvantaged.

These programs have been held annually since 1998 in Santana (where AMCEL's head office is located), Porto Grande (where AMCEL has an operational office) and Tartarugalzinho (where AMCEL has a seedling nursery). Over 2,800 people have participated in the programs.

#### 1 Escola da Madiera (lumber school)

A school designed to teach techniques in processing wood materials including furniture making

#### 2 Youth Project

This project is designed to teach participants skills that will allow them to take up positions as mechanics or hairdressers, as examples.

## ■ Providing Educational Opportunities through Sports

### Case Baseball clinic by the Ishinomaki Mill's baseball club (Nippon Paper Industries' Ishinomaki Mill)

The baseball club at Nippon Paper Industries' Ishinomaki Mill holds baseball clinics mainly during the winter. Joint practice sessions are regularly held with local youth teams and high school teams, and trainers are sent to work with these teams and explain training methods to players and coaches, as well. When it received a request for assistance by the High School Baseball Federation in Fukushima Prefecture, the club responded by holding three days of clinics for about 100 players on each day. The clinics welcomed four players from every high school team in the prefecture and were widely seen as a success.

The mill's baseball club actively contributes to local community outside of baseball, as well. For the Ishinomaki Kawabiraki Festival, for example, it lent a hand by making lanterns that were released onto the Kitakami River to mourn victims of the Great East Japan Earthquake.



Baseball clinic

# Outline of the Nippon Paper Group

## Company Profile (As of March 31, 2014)

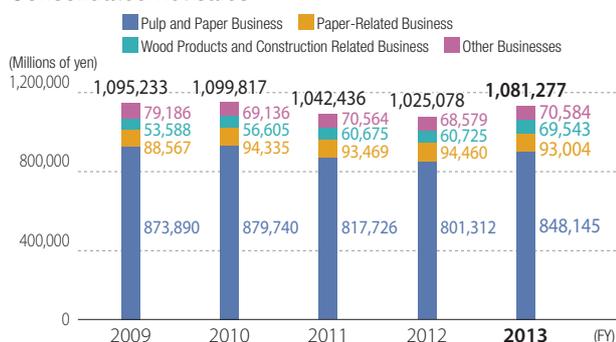
Trade Name Nippon Paper Industries Co., Ltd.  
 Address 4-6 Kandasurugadai, Chiyoda-ku, Tokyo, Japan  
 Capital ¥104.873 billion  
 Incorporation August 1, 1949  
 Listing Tokyo Stock Exchange (Securities code 3863)  
 Telephone +81-3-6665-1111

## Group Companies (As of March 31, 2014)

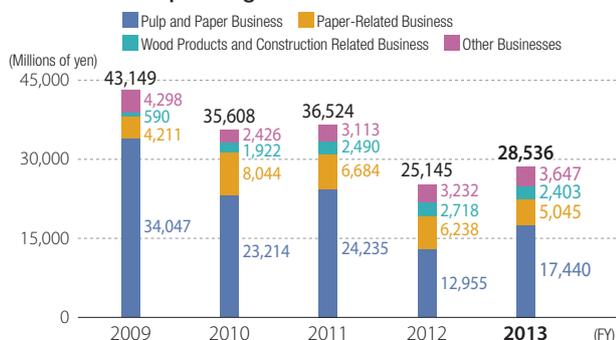
	Japan	North America	Australia	Asia	Europe	South America	Africa	Total
Consolidated subsidiaries	30	3	5	3	3	0	0	44
Non-consolidated subsidiaries	77	0	1	6	0	2	0	86
Affiliates	36	1	0	4	1	1	1	44
Equity-method affiliates	7	2	0	0	1	0	0	10

## Major Financial Indicators Trends

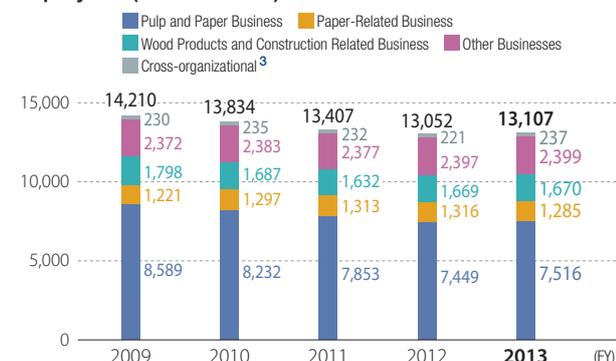
### Consolidated net sales<sup>1</sup>



### Consolidated operating income<sup>1</sup>



### Employees (consolidated)<sup>2</sup>

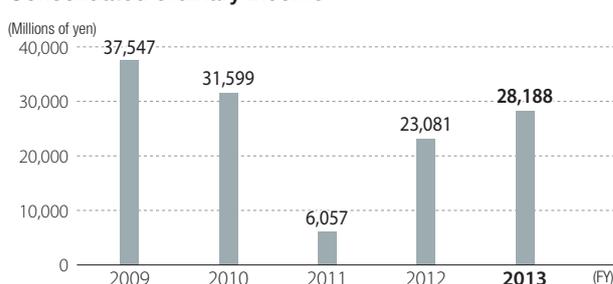


<sup>1</sup> The Nippon Paper Group reclassified its business segments in FY2010. Figures up to FY2009 represent data for business segments prior to reclassification.

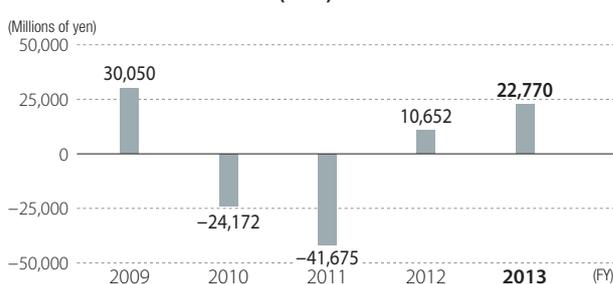
<sup>2</sup> Fiscal year-end data

<sup>3</sup> Employees responsible for multiple divisions.

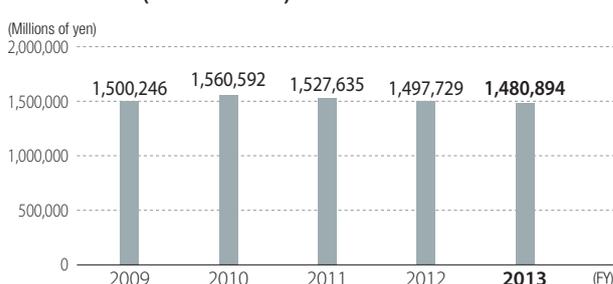
### Consolidated ordinary income



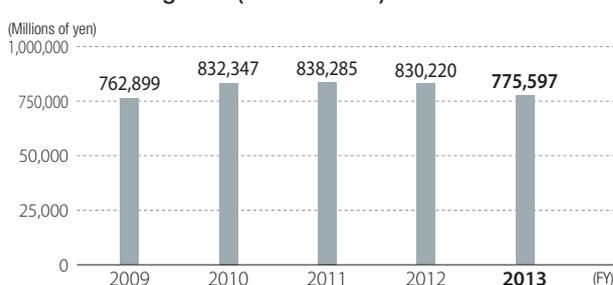
### Consolidated net income (loss)



### Total assets (consolidated)



### Interest-bearing debt (consolidated)



## Consolidated Subsidiaries (as of March 31, 2014)

### Pulp and Paper Business

Nippon Paper Crecia Co., Ltd., Nippon Paper Papyrus Co., Ltd., Paper Australia Pty Ltd. (and its 7 subsidiaries), NP Trading Co., Ltd., Kokuei Paper Co., Ltd., SUN OAK CO., LTD., Kitakami Paper Co., Ltd., Daishowa North America Corporation, Nippon Paper Industries USA Co., Ltd., Dyna Wave Holding Asia, and Jujo Thermal Oy

### Paper-Related Business

Sakurai Co., Ltd., Nippon Seitai Corporation, and FLOWRIC CO. LTD.

### Wood Products and Construction Related Business

Nippon Paper Lumber Co., Ltd., NIPPON PAPER UNITEC CO., LTD., Kokusaku Kiko Co., Ltd., Nippon Paper Ishinomaki Technology Co., Ltd., Kunimoku House Co., Ltd., PAL WOOD MATERIAL Co., Ltd., PAL Co., Ltd., N&E Co., Ltd., Daishowa Uniboard Co., Ltd., South East Fiber Exports Pty Ltd., Nanei Co., Ltd., Nichimoku Fancy Materials Co., Ltd., and Nippon Paper Resources Australia Pty Ltd.

### Other Businesses

NANKO UNYU CO., LTD., Kyokushin Transport Co., Ltd., NIPPON PAPER LOGISTICS CO., LTD., Hotoku Co., Ltd., SHIKOKU COCA-COLA BOTTLING CO., LTD. (and its 3 subsidiaries), Nippon Paper Development Co., Ltd., and GAC CO., LTD.

## The Status of Debt Ratings (As of September 30, 2014)

Ratings agency	Rating
Rating and Investment Information, Inc. (R&I)	Long-term bonds: A <sup>-</sup>
Japan Credit Rating Agency, Ltd. (JCR)	Long-term bonds: A

## Major Socially Responsible Investment (SRI) Indices Incorporating the Nippon Paper Group



Selected once again for inclusion in Ethibel Investment Register\* in May 2014

\* A universe of companies selected by Forum Ethibel, a Belgian organization that promotes socially responsible investment, for their outstanding performance in terms of social responsibility. In making its selections, Forum Ethibel assesses companies on criteria including human rights, human resources, environment, business behavior, corporate governance, and community impact.

## Major Environmental Performance Data<sup>1</sup>

		Unit	FY2009	FY2010	FY2011	FY2012	FY2013
Energy	Fossil energy input	Million GJ	98	97	88	91	97
	Non-fossil energy input <sup>2</sup>	Million GJ	73	76	69	66	77
	CO <sub>2</sub> emissions from fossil energy	Million tonnes of CO <sub>2</sub>	7.40	7.23	6.55	6.63	7.29
Water consumption		Million tonnes	963	958 <sup>3</sup>	870	953	883
Wastewater	Amount discharged	Million tonnes	937	942 <sup>3</sup>	843	905	907
	COD/BOD	Thousand tonnes	53.7	55.5 <sup>3</sup>	46.9	54.0	56.0
	SS	Thousand tonnes	21.0	20.3 <sup>3</sup>	16.8	21.3	22.0
Gas emissions	SO <sub>x</sub>	Thousand tonnes	3.23	3.96 <sup>3</sup>	3.37	3.50	3.34
	NO <sub>x</sub>	Thousand tonnes	7.46	7.73 <sup>3</sup>	7.05	7.95	9.03
	Soot and dust	Thousand tonnes	1.12	1.23 <sup>3</sup>	1.25	1.04	1.52
Waste	Amount generated	Thousand tonnes	649	699 <sup>3</sup>	688	737	769
	Final waste disposal	Thousand tonnes	24	31 <sup>3</sup>	44	49	79

<sup>1</sup> Australian Paper was added to the data collection scope in fiscal 2013.

<sup>2</sup> Energy from biomass and waste

<sup>3</sup> The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

## External Awards for Environmental Conservation Activities (FY2013)

Recipient	Award	Award Organization
Nippon Paper Industries Co., Ltd., Hokkaido Mill (Asahikawa)	Cherry Tree Seedling and Planting Activity	Asahikawa City

# Guideline Comparison Table (GRI Sustainability Reporting Guidelines)

Guideline Comparison Table (GRI Sustainability Reporting Guidelines Ver. 3.1)<sup>1</sup>

Item	ISO 26000 Clauses	Corresponding Page(s)	Contents
<b>1 Strategy and Analysis</b>			
1.1	6.2	4-5	Message from the President
		4-5	Message from the President
1.2		6-7, 10-11	The Sustainable Business Model of a Comprehensive Biomass Enterprise, The Business Strategy of a Comprehensive Biomass Enterprise
<b>2 Organizational Profile</b>			
2.1		72-73	Outline of the Nippon Paper Group
2.2		8-9, 51-56	Nippon Paper Group Business Overview, Responsibility to Our Customers
2.3	6.2	72-73	Outline of the Nippon Paper Group
2.4		72-73	Outline of the Nippon Paper Group
2.5		2	Major Operating Companies and Production Sites
		28	Promoting Overseas Afforestation
		62	Creating Workplaces that Support Diverse Human Resources
		72-73	Outline of the Nippon Paper Group
2.6		72-73	Outline of the Nippon Paper Group
2.7		72-73	Outline of the Nippon Paper Group
2.8		8-9	Nippon Paper Group Business Overview
		72-73	Outline of the Nippon Paper Group
2.9		Not applicable	—
2.10		73	External Awards for Environmental Conservation Activities
<b>3 Report Parameters</b>			
3.1		3	Period Covered
3.2		Back cover	Issued year, month
3.3		Back cover	Issued year, month
3.4		Back cover	Inquiries
3.5		14	CSR Materiality at the Nippon Paper Group
		20	Dialog with Stakeholders
3.6		3	Scope of Organizations Covered
3.7		3	Scope of Organizations Covered
3.8		3	Scope of Organizations Covered
3.9		35	Environmental Accounting
3.10		—	—
3.11		3	Scope of Organizations Covered
3.12		74-76	Guideline Comparison Table
3.13	7.5.3	—	—
<b>4 Governance, Commitments, and Engagement</b>			
4.1	6.2	16	Group Governance
4.2		16	Group Governance
4.3		16	Group Governance
4.4		16	Group Governance
		64	Industrial Relations
4.5		17	Compensation Paid to Directors
4.6		16	Group Governance
4.7		—	—
4.8		4-5	Message from the President
		18	The Nippon Paper Group's Action Charter
4.9		16	Group Governance
		18	CSR Management
		30-35	Policy and Management (Environment)
4.10		—	—
4.11		38-41	Mitigation of Climate Change
		42-45	Biodiversity Conservation
		60	Reinforcing Risk Assessment Procedures
4.12		18	The United Nations Global Compact
4.13		18	Collaborative Initiatives
4.14		20	Dialog with Stakeholders
4.15	20	Dialog with Stakeholders	
4.16	17	IR Activities	
	20	Dialog with Stakeholders	
	34	Environmental Communication	
	54	Identifying Customer Needs	
	64, 66	Industrial Relations, Fair Evaluation and Compensation	
	67-71	Community Responsibility	

Item	ISO 26000 Clauses	Corresponding Page(s)	Contents
4.17	6.2	3	Editorial Policy
		14	CSR Materiality at the Nippon Paper Group
		34	Environmental Communication
		42-45	Biodiversity Conservation
<b>5 Management Approach and Performance Indicators</b>			
<b>Economic Performance Indicator</b>			
DMA <sup>2</sup>	6.2/6.8	4-5	Message from the President
		18	CSR Management
EC1. Core	6.8/6.8.3/ 6.8.7/6.8.9	72-73	Outline of the Nippon Paper Group
		17	Trends in Dividends per Share
		35	Environmental Accounting
EC2. Core	6.5.5	6-7	The Sustainable Business Model of a Comprehensive Biomass Enterprise
		10-11	The Business Strategy of a Comprehensive Biomass Enterprise
		35	Environmental Accounting
EC3. Core		—	—
EC4. Core		—	—
EC5. Add	6.4.4/6.8	—	—
EC6. Core	6.6.6/6.8/ 6.8.5/6.8.7	22	Philosophy and Basic Policy Concerning Raw Materials Procurement
EC7. Core	6.8/6.8.5/ 6.8.7	—	—
EC8. Core	6.3.9/6.8/6.8.3/ 6.8.4/6.8.5/ 6.8.6/6.8.7/6.8.9	6-7, 10-11	The Sustainable Business Model of a Comprehensive Biomass Enterprise, The Business Strategy of a Comprehensive Biomass Enterprise
		26-27	Protecting and Nurturing Japan's Wood Resources
		42-45	Biodiversity Conservation
		67-71	Community Responsibility
EC9. Add	6.3.9/6.6.6/ 6.6.7/6.7.8/ 6.8/6.8.5/ 6.8.6/6.8.7/ 6.8.9	12-13	Social Issues and the Nippon Paper Group's Value Creation Flow
		35	Environmental Accounting
<b>Environment Performance Indicator</b>			
DMA <sup>2</sup>	6.2/6.5	22	Policy and Management (Forest Management and Raw Material Procurement)
		30-35	Policy and Management (Environment)
EN1. Core	6.5/6.5.4	23	Current Status of Raw Materials Procurement
		36-37	Material Balance
EN2. Core		50	Promotion of Waste Paper Recycling
EN3. Core		36-37	Material Balance
EN4. Core		38-41	Mitigation of Climate Change
		36-37	Material Balance
EN5. Add		38-41	Mitigation of Climate Change
		40	Advancing Energy Efficiency in Logistics
EN6. Add		31	Environmental Action Plan
EN7. Add		38-41	Mitigation of Climate Change
EN8. Core	—	—	
	36-37	Material Balance	
EN9. Add	47	Preventing Water Pollution	
EN10. Add	—	—	
EN11. Core	6.5/6.5.6	42	Breakdown of Company-Owned Forests in Japan by IUCN Category
EN12. Core		24-25	Sustainable Procurement of Raw Materials
		26-27	Protecting and Nurturing Japan's Wood Resources
		42-45	Biodiversity Conservation
EN13. Add		26-27	Protecting and Nurturing Japan's Wood Resources
		42-45	Biodiversity Conservation
EN14. Add		42-45	Biodiversity Conservation
EN15. Add		42-45	Biodiversity Conservation

<sup>1</sup> There is no official cross reference for GRI 3.1 guidelines and the ISO 26000 clauses. This table, therefore, was prepared based on information on how the GRI 3.0 guidelines relate to ISO 26000 clauses.

<sup>2</sup> DMA: Disclosure(s) on Management Approach

Item	ISO 26000 Clauses	Corresponding Page(s)	Contents	
EN16. Core	6.5/6.5.5	36-37	Material Balance	
		38-41	Mitigation of Climate Change	
EN17. Core		—	—	
EN18. Add	6.5/6.5.5	38-41	Mitigation of Climate Change	
EN19. Core	6.5/6.5.3	49	Responding to the PRTR Law	
EN20. Core		36-37	Material Balance	
		47	Initiatives to Prevent Environmental Pollution	
EN21. Core		36-37	Material Balance	
EN22. Core		36-37	Material Balance	
		46	Reducing Waste Generation and Final Disposal	
EN23. Core		33	Status with regard to Legal Compliance	
EN24. Add		46	Reducing Final Waste Disposal	
EN25. Add		6.5/6.5.4/ 6.5.6	43	Reducing the Environmental Impact of Production Activities
EN26. Core		6.5/6.5.4/ 6.6/6.7.5	55-56	Product Development that Responds to Demands and Expectations
EN27. Core	6.5/6.5.4/ 6.7.5	50	Promotion of Waste Paper Recycling	
EN28. Core	6.5	33	Status with regard to Legal Compliance	
EN29. Add	6.5/6.5.4/ 6.6.6	40	Advancing Energy Efficiency in Logistics	
EN30. Add	6.5	35	Environmental Accounting	
<b>Product Responsibility Performance Indicator</b>				
DMA <sup>2</sup>	6.2/6.6/6.7	52-54	Policy and Management (Customers)	
PR1. Core	6.3.9/6.6.6/ 6.7/6.7.4/ 6.7.5	52-54	Approach toward Product Safety, Initiatives for Quality Stabilization	
PR2. Add		—	—	
PR3. Core	6.7/6.7.3/ 6.7.4/6.7.5/ 6.7.6/6.7.9	51-56	Responsibility to Our Customers	
PR4. Add		—	—	
PR5. Add	6.7/6.7.4/ 6.7.5/6.7.6/ 6.7.8/6.7.9	54	Identifying Customer Needs	
PR6. Core	6.7/6.7.3/ 6.7.6/6.7.9	54	Identifying Customer Needs	
PR7. Add		—	—	
PR8. Add	6.7/6.7.7	—	—	
PR9. Core	6.7/6.7.6	—	—	
<b>Labor Practices and Decent Work Performance Indicator</b>				
DMA <sup>2</sup>	6.2/6.4/ 6.3.10	58	Policy and Management (Human Rights, Employment and Labor)	
		59-60	Basic Stance (Occupational Safety and Health), System to Promote Occupational Safety and Health	
LA1. Core	6.4/6.4.3	62	Recruitment and Employment	
LA2. Core		62-64	Creating Workplaces that Support Diverse Human Resources	
LA3. Add	6.4/6.4.3/ 6.4.4	62-64	Creating Workplaces that Support Diverse Human Resources	
LA15. Core	6.3/6.4/ 6.4.3/6.4.4/ 6.4.5	62	Recruitment and Other Human Resources Data	
		64	Promoting Work-Life Balance	
LA4. Core	6.3.10/6.4/ 6.4.3/6.4.4/ 6.4.5	64	Industrial Relations	
LA5. Core	6.4/6.4.3/ 6.4.4/6.4.5	—	—	
LA6. Add	6.4/6.4.6	59	System to Promote Occupational Safety and Health	
		64	Industrial Relations	
LA7. Core		60	Status of Occupational Accidents	
LA8. Core	6.4/6.4.6/ 6.8/6.8.3/ 6.8.4/6.8.8	61	Efforts regarding Hygiene and Health	
LA9. Add	6.4/6.4.6	59	Basic Stance (Occupational Safety and Health)	
		61	Efforts regarding Safety and Disaster Prevention	
LA10. Core	6.4/6.4.7	19	Implementing compliance training	
		19	Respect for Intellectual Property	
		34	Environmental Education and Training	
		61	Safety Education	
		65-66	Cultivating Human Resources	
LA11. Add	6.4/6.4.7/ 6.8.5	65-66	Cultivating Human Resources	
LA12. Add	6.4/6.4.7	66	Fair Evaluation and Compensation	

Item	ISO 26000 Clauses	Corresponding Page(s)	Contents
LA13. Core	6.3.7/ 6.3.10/ 6.4/6.4.3	62-64	Creating Workplaces that Support Diverse Human Resources
LA14. Core	6.3.7/6.3.10/ 6.4/6.4.3/ 6.4.4	—	—
<b>Human Rights Performance Indicator</b>			
DMA <sup>2</sup>	6.2/6.3	22	Policy and Management (Forest Management and Raw Material Procurement)
		58	Policy and Management (Human Rights, Employment and Labor)
HR1. Core	6.3/6.3.3/ 6.3.5/6.6.6	24-25	Sustainable Procurement of Raw Materials
HR2. Core	6.3/6.3.3/ 6.3.5/ 6.4.3/ 6.6.6	24-25	Sustainable Procurement of Raw Materials
HR3. Core	6.3/6.3.5	58	Education and Training with Respect to Human Rights
HR4. Core	6.3/6.3.6/ 6.3.7/ 6.3.10/ 6.4.3	—	—
HR5. Core	6.3/6.3.3/ 6.3.4/6.3.5/ 6.3.8/6.3.10/ 6.4.3/6.4.5	24	Action Plan for Wood-Based Raw Material Procurement
		58	Philosophy and Basic Policy on Human Rights, Employment and Labor
HR6. Core	6.3/6.3.3/ 6.3.4/6.3.5/ 6.3.7/6.3.10	24	Action Plan for Wood-Based Raw Material Procurement
		58	Philosophy and Basic Policy on Human Rights, Employment and Labor
HR7. Core	6.3/6.3.3/ 6.3.4/6.3.5/ 6.3.7/6.3.10	24	Action Plan for Wood-Based Raw Material Procurement
		58	Philosophy and Basic Policy on Human Rights, Employment and Labor
HR8. Add	6.3/6.3.5/ 6.4.3/6.6.6	58	Education and Training with Respect to Human Rights
HR9. Add	6.3/6.3.6/ 6.3.7/6.3.8/ 6.6.7	—	—
HR10. Add		25	Acquiring Certification for Company-Owned Forests Inside and Outside Japan, Promoting Procurement of Wood Resources from Certified Forests
HR11. Add		—	—
<b>Society Performance Indicator</b>			
DMA <sup>2</sup>	6.2/6.6/6.8	16	Internal Control System
		18-19	CSR Management, Compliance
		22	Policy and Management (Forest Management and Raw Material Procurement)
		68	Policy and Management (Community)
SO1. Core	6.3.9/6.6.7/ 6.8/6.8.5/ 6.8.7	—	—
SO9. Core		47-49	Initiatives to Prevent Environmental Pollution
SO10. Core		47-49	Initiatives to Prevent Environmental Pollution
SO2. Core		—	—
SO3. Core	6.6/6.6.3	19	Implementing compliance training
SO4. Core		—	—
SO5. Core	6.6/6.6.4/ 6.8.3	18	Collaborative Initiatives
SO6. Add		—	—
SO7. Add	6.6/6.6.5/ 6.6.7	Not applicable	—
SO8. Core	6.6/6.6.7/ 6.8.7	Not applicable	—

# Guideline Comparison Table (*Environmental Reporting Guidelines*) / Comparison Table (the United Nations Global Compact)

## Guideline Comparison Table (*Environmental Reporting Guidelines*, Ministry of the Environment)

Item	Corresponding Page(s)	Contents
<b>Basic Issues of Environment Reporting</b>		
1. (1)	3	Editorial Policy
1. (2)	3	Editorial Policy
1. (3)	3	Editorial Policy
1. (4)	3, Back Cover	Editorial Policy
2	4-5	Message from the President
3. (1)	4-5, 6-7, 10-11	Message from the President, The Sustainable Business Model of a Comprehensive Biomass Enterprise, The Business Strategy of a Comprehensive Biomass Enterprise
3. (2)	31	The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) Fiscal 2013 Status
3. (3)	31	The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) Fiscal 2013 Status
4	36-37	Material Balance
<b>Status of Environmental Management (MP)</b>		
1. (1)	30-35	Policy and Management (Environment)
1. (2)	6-11	The Sustainable Business Model of a Comprehensive Biomass Enterprise, Nippon Paper Group Business Overview, The Business Strategy of a Comprehensive Biomass Enterprise
2. (1)	32	Environmental Management Promotion Structure
2. (2)	30-35	Policy and Management (Environment)
2. (3)	33, 47-49	Strengthening Environmental Compliance, Initiatives to Prevent Environmental Pollution
3. (1)	20, 34	Dialog with Stakeholders, Environmental Communication
3. (2)	42-45, 70	Biodiversity Conservation, Environmental Activities
4. (1)	12-13, 22, 30-31	Social Issues and the Nippon Paper Group's Value Creation Flow, Policy and Management (Forest Management and Raw Material Procurement), Environmental Action Plan
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2	6-7, 39, 46	The Sustainable Business Model of a Comprehensive Biomass Enterprise, Fuel Conversion Led by the Adoption of Biomass Boilers, Reducing Waste Generation and Final Disposal
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<b>Other Issues</b>		
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## Comparison Table (the United Nations Global Compact)

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<b>Human Rights</b>		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	22, 24-25, 57-66
Principle 2	Businesses should make sure that they are not complicit in human rights abuses.	22, 24-25, 57-66
<b>Labor Standards</b>		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	58, 64
Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labor.	22, 24-25, 58
Principle 5	Businesses should uphold the effective abolition of child labor; and	22, 24-25, 58
Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	58, 62-64
<b>Environment</b>		
Principle 7	Businesses should support a precautionary approach to environmental challenges.	22, 24-25, 29-50
Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility.	4-5, 6-7, 10-11, 21-28, 29-50
Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	10-11, 44, 46, 55-56
<b>Anti-Corruption</b>		
Principle 10	Businesses should work against corruption in all its forms including extortion and bribery.	18-19, 22



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### Profile

After leaving the doctoral program at the Sophia University Graduate School of Economics, Professor Kozuma became a research assistant at the Nagoya Institute of Technology and attended the Limperg Instituut, the Inter-University Institute for Accounting and Auditing in the Netherlands, as a guest researcher funded by the Dutch government. He became an associate professor at the University of Shizuoka School of Administration and Informatics, and then took up his current position as professor in the Faculty of Economics at Sophia University. He has held successive positions as the chair or member of various CSR- or environment-related advisory panels, study groups, and research conferences for the Ministry of the Environment; the Ministry of Economy, Trade and Industry; the Ministry of Land, Infrastructure, Transport and Tourism; the Cabinet Office; and the Japanese Institute of Certified Public Accountants.

### Third-Party Comments

The Nippon Paper Group's efforts to transform its business structure to one enabling it to be a comprehensive biomass enterprise – the core strategy of the Group's Fourth Medium-Term Business Plan – have assumed even greater clarity. CSR management is fully integrated in the new business structure and the Group is overseeing its value chain in ways that harmonize the pursuit of earnings opportunities and the management of CSR risks in accordance with growth scenarios premised on the sustainable development of society.

In the field of energy, for example, advances have been made in the Group's efforts to commercialize biomass power generation and biomass fuel. Ongoing efforts to power production activities with non-fossil energy have increased use of this environmentally friendly option to the point where it fulfills 45% of Group energy needs, and makes the Group a leading user of biomass energy in Japan. To secure supply chain stability – a factor vital to its business activities – the Nippon Paper Group goes to great lengths to ensure that its raw material procurement is not only environmentally responsible, in terms of excluding illegally harvested trees, but also promotes social sustainability. In its fiscal year 2013, for example, the Group met with Amnesty International Japan and achieved progress on the matter of a supply-chain human rights impact assessment. All of the points mentioned here merit significant praise.

Turning to information disclosure, an improvement could be achieved by increasing the coverage ratio. The inclusion of Australian Paper within the reporting boundary beginning with the current report increases the coverage ratio in terms of consolidated sales to 94%. Considering also that information on major production sites includes coverage of non-consolidated subsidiaries, it can be surmised that the reporting scope provides for considerable coverage of important sources of environmental risk. Nevertheless, boundaries are defined variously, depending on the data presented. While companies comprising the Group serve as the reporting boundary for data on the material balance, key environmental performance indicators, and PRTR matters, other data is presented based on a reporting boundary defined as either domestic Group entities or the parent company. In these cases, too, however, it will likely be necessary to extend reporting boundaries in the future. Regarding data on global warming, in particular, the same kind of data is presented multiple times but with a different reporting boundary for each; in the future, one would like to see the use of a single reporting boundary.

As for meeting direct responsibilities to people, the Group deserves praise for reducing its occupational accident frequency rate to the lowest reporting level over the past five years. However, the severity of accidents that have happened and the unfortunate occurrence of a fatal accident point to the need for further improvement of safety going forward. In addition, expansion of the reporting boundary for information on personnel and labor matters as the related technical issues are resolved would be welcome. Presently limited to the parent company, the reporting boundary could be extended to cover all domestic Group entities.

### Action in Response to Third-Party Comments

Our Sustainability Report 2014 combines the full and highlight editions we have previously issued into a single edition that reports on key initiatives while preserving comprehensiveness of coverage. Key initiatives include those intimately tied to the business model and strategies the Nippon Paper Group has formulated as a comprehensive biomass enterprise, as well as initiatives related to the Group's principal products and value chain. In producing our Sustainability Report, we concentrated on providing clear, coherent explanations of the particulars of these initiatives, the objectives we have set, and our progress in attaining them.

Regarding points made by Professor Kozuma in his evaluation, we are moving step by step to expand the scope of our information disclosure activities and to improve our performance in meeting direct responsibilities to society. Having set higher objectives, we are pushing ahead with efforts to improve individual initiatives, including ones addressing the safety concerns raised by Professor Kozuma.

As for our use of multiple reporting boundaries, this has resulted from the process of widening the disclosure scope as we have expanded our ability to collect data. When the reporting boundary or scope of data collection differs from that stated in our editorial policy, we indicate that fact with an explanatory note. Going forward, however, steps will be taken to improve the way we present and explain data to help ensure that it is clearly understood by readers.

We will continue to improve our pursuit of business activities emphasizing coexistence with society, as we further our dialogue with stakeholders, and welcome your candid opinions and critiques to help us move forward.

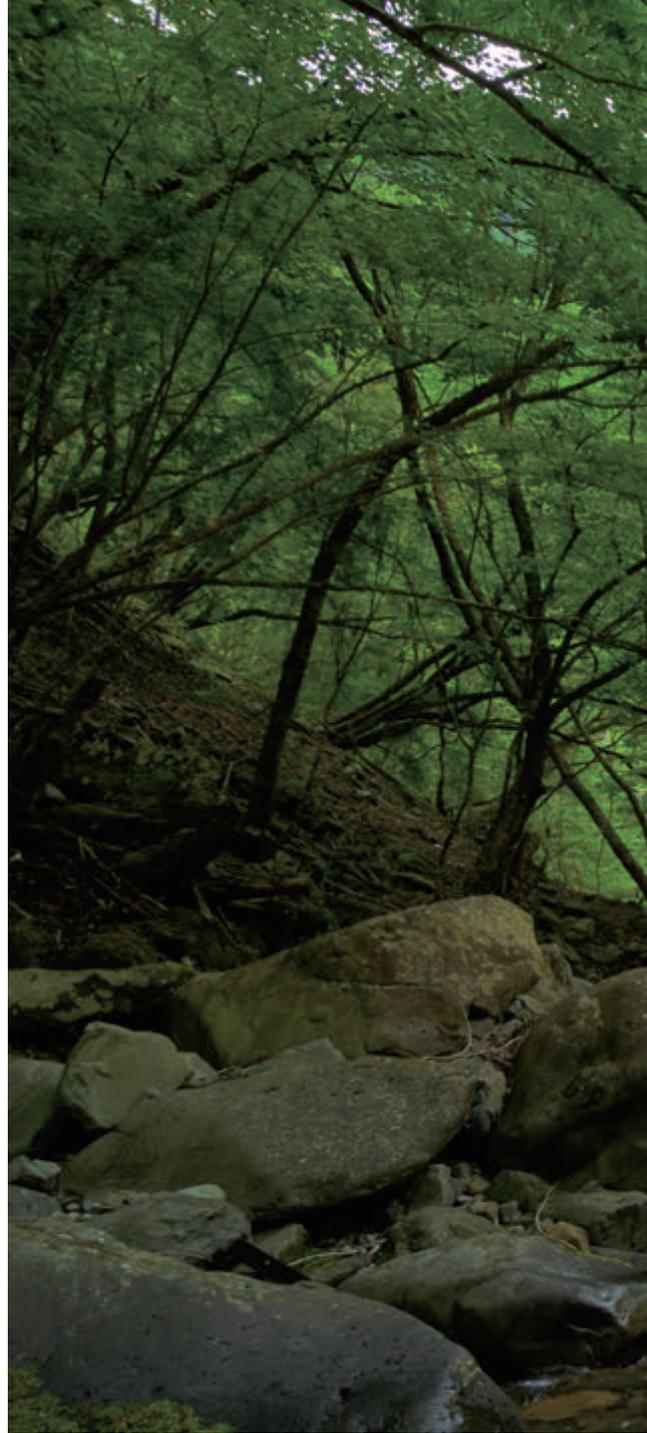


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## Cover Photograph



Odaigahara Forest owned by Nippon Paper Industries

Photographer:  
Yuhji Itsumi



The cost of the paper used in this report includes a portion of expenses for the use of timber discarded in forests following tree thinning.

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